

Okanagan Basin Water Board Meeting Agenda



DATE: June 1, 2010

TIME: 10:00am to 2:00pm

PLACE: Regional District Okanagan-Similkameen
101 Martin Street, Penticton, BC

1. **CALL MEETING TO ORDER**

2. **APPROVAL OF AGENDA**

3. **INTRODUCTION OF LATE ITEMS**

4. **ADOPTION OF MINUTES**

4.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of May 4, 2010 at the Regional District of Central Okanagan in Kelowna

5. **DELEGATIONS**

5.1 Carolina Restrepo-Tamayo, Coordinator of Okanagan Collaborative Conservation Program, on new Sustainability Planning website (SPOKE/OKCP)

6. **STAFF REPORTS**

6.1 Executive Director Report

6.1.1 Report from Australia – Lessons from the Outback PowerPoint presentation

6.2 Water Stewardship Director Report

6.3 Office and Grants Administrator Report

6.3.1 Report on Canadian Environmental Grantmakers' Network conference

6.4 Communications and Research Coordinator Report

7. **NEW AND UNFINISHED BUSINESS**

7.1 Sewerage Facilities Grant in City of Vernon

7.2 Sewerage Facilities Grants in RDOS – Okanagan Falls and City of Penticton

7.3 RDCO lease agreement

8. **CORRESPONDENCE**

8.1 Minister of Community and Rural Development, Bill Bennett; notice of funding for Okanagan Basin-wide Drought Response Plan

8.2 Grand Chief Stewart Phillip to B.C. Environment Minister Barry Penner, regarding the Water Act Modernization process

9. **NEXT MEETING**

9.1 The next regular meeting of the Okanagan Basin Water Board will be held on July 6, 2010, at the Regional District of North Okanagan.

10. **ADJOURNMENT**



Okanagan Basin Water Board
Regular meeting
June 1, 2010
Agenda No: 4.1

**MINUTES OF A REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD
HELD MAY 4, 2010, AT REGIONAL DISTRICT OF CENTRAL OKANAGAN,
1450 KLO RD., KELOWNA, BRITISH COLUMBIA**

PRESENT

Chair Stu Wells	Regional District Okanagan-Similkameen
Vice-Chair Rick Fairbairn	Regional District North Okanagan
Director Buffy Baumbrough	Regional District North Okanagan
Director Gyula Kiss	Regional District North Okanagan
Director James Baker	Regional District Central Okanagan
Director Doug Findlater	Regional District Central Okanagan
Director Graeme James	Regional District Central Okanagan
Director Michael Brydon	Regional District Okanagan-Similkameen
Director Gordon Clark	Regional District Okanagan-Similkameen
Alt. Director Mark Pendergraft	Regional District Okanagan-Similkameen
Director Bernie Bauer	Okanagan Water Stewardship Council
Director Toby Pike	Water Supply Association of BC

REGRETS

Director George Saddleman	Okanagan Nation Alliance
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OBWB STAFF

Nelson Jatel	Water Stewardship Director
Genevieve Dunbar	Office and Grants Administrator
Corinne Jackson	Communications and Research Coordinator
Amanda Cadorette	Outreach and Education Assistant

GUESTS

Dr. Jeff Curtis	UBC Okanagan
Tricia Brett	UBC Okanagan

1. CALL MEETING TO ORDER

Chair Wells called the meeting to order at 10:05 a.m.

2. APPROVAL OF AGENDA

"THAT the agenda of the regular meeting of the Okanagan Basin Water Board of April 6, 2010 be approved."

CARRIED

3. INTRODUCTION OF LATE ITEMS

No late items.

4. ADOPTION OF MINUTES

- 4.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of April 6, 2010 at Regional District of North Okanagan in Coldstream.

Amendment: Correction of vote

“THAT the minutes of the regular meeting of the Okanagan Basin Water Board of April 6, 2010 at Regional District of North Okanagan in Coldstream be adopted as amended.”
CARRIED

5. STAFF REPORTS

- 5.1 Executive Director Report

Mr. Jatel provided an overview of Dr. Warwick Sears' report, noting a tour of the Westbank Treatment Plant will be rescheduled when plant staff members are available.

Training seminars were conducted on the Okanagan Water Supply and Demand Study's (OWSD) Okanagan Hydrology and Water Accounting Models in March. They included 20 people at the one-day manager's training, and 17 researchers, government staff and consultants at a three-day technical session.

Ms. Jackson noted that a submission to the Water Act Modernization process, prepared by the Phase 2 OWSD Working Group, was distributed to board members.

Dir. Baker entered the room at 10:08 a.m.

Dir. Clark asked how performance of the milfoil operation is measured to ensure accountability.

Ms. Dunbar responded that the operators report at the end of the day what areas have been worked and for how many hours. If they haven't moved far, it is often because the milfoil is dense in that area, she added. Based on growth patterns, there are times when the program needs to review the areas in which they are working. There are also maps of the areas where work has been done, Ms. Dunbar said.

Dir. Wells agreed with Dir. Clark and asked that staff look at other ways to measure the effectiveness of the milfoil program.

Dir. Fairbairn asked whether OBWB staff are still considering offering the milfoil control program in other areas. Ms. Dunbar said that that was considered some years ago, but that staff are kept busy controlling the weed in our own jurisdiction. If the Water Board were to consider expanding this service it would have to be done on a cost-recovery basis and is not being looked at at this time.

In response to a question from Dir. Kiss, Ms. Dunbar noted that most of the work is de-rooting. Harvesting is not as effective, she said, adding the fragmentation that occurs with harvesting causes more growth. As well, harvesting season is in the summer which is also boating season, making it difficult to get the work done.

“THAT the Executive Director Report from Dr. Warwick Sears, dated April 28, 2010, be received.”

CARRIED

5.2 Water Stewardship Director Report

Mr. Jatel reported on the April Okanagan Water Stewardship Council (OWSC) meeting and Chris Johnston's presentation on rainwater, adding the subject will be the focus of a conference in October. The conference will be jointly hosted by the OBWB and the BC Water and Wastewater Association.

Staff are looking to videotape upcoming presentations at OWSC meetings and post them to the OBWB website, making them available to board members and the public. Videotaping will begin next week with presentations from UBC-O's Dr. John Janmaat, who has been studying First-in-Title, First-in-Right in the Okanagan and from two water economic specialists: Dr. Ron Griffin (University of Texas) and Dr. Henning Bjornlund (University of Lethbridge).

Phase 1 of the Streamlined Water Use Reporting Tool (SWURT) development is underway. The tool will have water suppliers record their water use monthly, instead of annually, allowing for better drought planning. There is great interest from various provincial ministries, including Ministry of Environment, Community Services, and Healthy Living and Sport – which is looking at developing a database of water quality from water purveyors.

The next phase will be to build a template to take back to water suppliers and ministry staff, determining our target. Phase 2 is expected to be completed by Dec. 31.

It is interesting to note, said Mr. Jatel, that the Columbia Basin Treaty is up for renegotiation in 2013. Fish and First Nations issues are required to be addressed. Water for fish flows in the US, so the government can meet its commitments to the First Nations fishery, will be part of these discussions. As such, we need to be aware of potential implications for the Okanagan Basin.

“THAT the Water Stewardship Director Report from Mr. Jatel, dated April 28, 2010, be received.”

CARRIED

5.3 Communications and Research Coordinator Report

Last month, the board requested that staff review how to improve communication with the public about upcoming board meetings. Ms. Jackson reported that, in response, staff have posted the Water Board meeting schedule and front page of the agenda package to the OBWB website. The website also notes that full packages are available on request, allowing staff to point out items that are merely in the draft stages.

After lengthy discussion it was agreed that full agenda packages should be posted to the website, with the exception of in-camera items, to ensure full transparency. It was further noted that draft documents should be watermarked “Draft” so that there is no misunderstanding from the public.

Dir. Pike also suggested that minutes, included in the board agenda, be marked draft until they are approved.

Dir. Clark noted that the Local Government Act sets out procedures and the OBWB operates under Letters Patent. However, he said, perhaps the Water Board needs a Procedural Bylaw. A survey of Procedural Bylaws in other jurisdictions and what they do around posting of agendas might be helpful, he added.

“THAT the Okanagan Basin Water Board post the full board meeting agenda package, except in-camera material, to its website.”

CARRIED

There was much discussion around minute taking and the recording of a mover and seconder on motions. It was noted that often someone will “move” an item to merely get it on the table for discussion. However, this is not understood by a number of people who think that a vote to move or second is a vote in favour of a particular motion.

Dir. Clark exited the meeting at 11:08 a.m.

Dir. Kiss suggested that he would like to see the mover and seconder recorded since there are 12 board members representing different sectors. However, Dir. Brydon noted that moving and seconding is random but can be misconstrued too easily. After further discussion it was decided that movers and seconders would no longer be recorded, only votes of opposition will be recorded.

“THAT the Okanagan Basin Water Board adopt a policy that minutes will no longer record a ‘mover’ or ‘seconder,’ and that all votes of opposition be recorded.”

CARRIED

Dir. Clark reentered the meeting at 11:10 a.m.

Ms. Jackson noted that Dir. Saddleman contacted OBWB staff, thanking them for keeping him apprised of Water Board activities and stated that other commitments have made it difficult to attend board meetings. He copied ONA administration in on his correspondence and requested they find a replacement for him.

Board members noted that ONA representation, whether it’s an elected official, staff or perhaps a member of the community, is what’s important. Input on water issues from a First Nations perspective would be extremely beneficial.

“THAT the Communications and Research Coordinator Report from Ms. Jackson, dated April 27, 2010, be received.”

CARRIED

6. NEW AND UNFINISHED BUSINESS

6.1 Update on Drought Webinar

Mr. Jatel provided an update on the Drought-Proofing the Okanagan webinars, noting that the second session had 36 people tuned in. The first session had 28 in attendance. This latest session had farmers and agriculturalists participating, added Mr. Jatel. The intention, he said, is to inform the public about water levels in the Okanagan basin, allowing them to prepare accordingly.

An overview of the April 14 webinar was provided, which included input from Ministry of Environment, Osoyoos Lake Board of Control, Agriculture Canada, and Environment Canada. Most areas in the valley were showing warmer temperatures, and less precipitation, noted Mr. Jatel. In fact, the day before the webinar, Osoyoos Lake Board of Control declared a drought which allows them to increase the water level on Osoyoos Lake to meet agricultural demands,

he added.

In response to people's request, the second webinar was set up to allow people to ask questions which Mr. Jatel could then refer to the appropriate presenter. This worked well. The board will be made aware of the next session once a date is set.

6.2 Watermilfoil program – work truck purchase

There was some question about going to a regional district for repairs on OBWB vehicles as a cost-saving measure. However, after some short discussion it was decided that the fleet is small enough and the OBWB's milfoil staff are capable mechanics, having been able to keep their 1997 Chevrolet half-ton pick-up operating with 285,000 km on it.

“THAT the Okanagan Basin Water Board approve up to \$30,000 from the equipment reserve fund for the purchase of a new work truck for the watermilfoil control program.”
CARRIED

7. CORRESPONDENCE

7.1 MLA John Slater, Parliamentary Secretary for Water Supply and Allocation, response to OBWB letter re: Brown's Creek source protection

“THAT the Okanagan Basin Water Board receive the correspondence from MLA John Slater, Parliamentary Secretary for Water Supply and Allocation in response to the OBWB letter re: Brown's Creek source protection.”
CARRIED

7.2 Chris Branch, President of North Central Washington Resource Conservation and Development, re: joint NASA project

“THAT the Okanagan Basin Water Board receive the correspondence from Chris Branch, President of North Central Washington Resource Conservation and Development, regarding the joint NASA project.”
CARRIED

In response to questions from the board, Mr. Jatel gave an update on the NASA project, noting that a joint application is being put forward by the OBWB and a group of U.S. partners to NASA for ROSES (Research Opportunities in Space and Earth Sciences) funding. Mr. Jatel will be attending an upcoming meeting in Chelan, WA.

The remote sensing satellite technology will improve the OWSD models and should also allow for greater hydrometric monitoring. Project partners are also looking at how to support fish and fish habitat with remote sensing, Mr. Jatel added.

The \$20,000 Mr. Branch referred to in his letter was for developing three management tools: 1) a scoping document, 2) a project charter, and 3) a funding proposal to NASA's ROSES program. Satellite data is not useful without interpretation. These proposals address the conducting of research to interpret the data, concluded Mr. Jatel.

“THAT the Okanagan Basin Water Board receives the NASA project report.”
CARRIED

Dir. Baker exited the room at 11:48 a.m.

Dir. Kiss exited the room at 12:20 p.m.

Reconvened at 12:30 p.m.

8. DELEGATIONS

8.1 Dr. Jeff Curtis and master's candidate Tricia Brett, UBC Okanagan: Okanagan Endocrine Disruptor Research Project

Dir. Wells introduced the agenda item, noting the Endocrine Disruptor Compounds (EDCs) Project was of great interest to him during his time on the Okanagan Water Stewardship Council and that he's happy to hear some results. Project partners besides the OBWB include the Okanagan Indian Band, Health Canada, Ministry of Environment, Interior Health, and UBC-Okanagan, he added.

Dr. Curtis began by providing some background to the research, noting that the Okanagan has among the lowest per capita water supply in Canada, and that estrogens are an emerging contaminant but they are still not well understood.

In the Okanagan, there is a lot of variability in the effluent coming out of treatment plants. For one thing, they were never designed to remove estrogens, but also the effects of loading, chemical matrix, treatment plant design and seasonal changes result in that variability.

This project measured estrogens in treated wastewater in treatment plants in Vernon, Kelowna and Penticton, and measured them again in the receiving waters, where they come out. In the case of Vernon, the treated water ends up and was tested at the MacKay Reservoir, in Kelowna – Okanagan Lake, and in Penticton – Okanagan River Channel. The study looked at the level of dilution of the EDCs and rate of degradation.

Studies indicate that concentrations of 5 ng L⁻¹ (parts per trillion) have caused collapse of fish species, said Dr. Curtis. The numbers found in the receiving plants, particularly in Vernon and Kelowna, were high and what one would expect, added Dr. Curtis. In Vernon, it was 5.0 ng/L (\pm 1.9); In Kelowna, 64.8 ng/L (\pm 10.8); In Penticton, 1.2 ng/L (\pm 0.7). However, the compounds are diluted in large volume in Kelowna with Okanagan Lake. In Penticton, they are diluted in small volume through the Okanagan River channel; and not at all with the MacKay reservoir in Vernon, he added, explaining that in the latter case, the wastewater is used as spray irrigation.

Looking at the amount of EDCs in receiving waters, levels were detected in the MacKay Reservoir, but not in Vernon tailing waters, added Curtis. Levels were also not detected in Okanagan Lake, but they were noted in Okanagan River.

Following up on the Vernon wastewater being used as irrigation, research was conducted on EDCs entering Kalamalka and north end of Okanagan Lakes, and none was detected, noted Dr. Curtis.

In the case of Kelowna, the fact that the compounds end up in a body of water allows them to degrade over time. However, there was no measured degradation with the Penticton effluent in Okanagan River.

Also, although no EDCs were found in Kelowna's Okanagan Lake, researchers also couldn't find the plume where the treated wastewater was entering the lake. As part of the next phase of

their study, they will continue to look for the plume to measure the EDC's coming from it and see if it is near any kokanee populations. At this point, it is predicted that levels would be .026 ng/L total estrogens, well below what would collapse fish populations, added Dr. Curtis.

The next phase will also look at seasonal affects on dilution and degradation.

Such research is important in light of the low per capita water supply in the Okanagan, stressed Dr. Curtis. It will also assist others who want to conduct EDC studies elsewhere, he concluded.

In response to Dir. Pike and why the plume in Okanagan Lake needs to be found, Dr. Curtis said that without that information much is still unknown. For example, is the pipe where it should be, is it installed correctly, what is the rate of EDCs coming out of it?

Ms. Brett, who was heavily involved in the research, responded to questions about the affect of EDCs on fish and noted they have been known to cause male fish to develop ovaries and reduce their testicle size.

Dir. Fairbairn asked if work is being done to remove EDCs specifically in the treatment of wastewater. Dr. Curtis said he believes those studies are being conducted, as well as ones to improve on removing the compounds the plants are meant to remove.

In response to Dir. Clark's question about the safety of inner-tubing on Penticton's channel, Ms. Brett said that any exposure to EDCs would be negligible. Fish are different, she added, saying that the EDCs enter their system through the gills.

Dir. Findlater asked if there was any concern about eating fish from the lake. Dr. Curtis said that wasn't part of the study. Ms. Brett added that although EDCs affect fish, it is unclear if it affects humans who digest the fish. Whereas this study looked at endocrine disruptors in water, there are other sources of EDCs – for example in plastics – where this has been a concern and some chemicals have been banned, they noted.

Dir. Findlater left the room at 1:18 pm.

Dr. Curtis noted that fish in our lakes are the equivalent of the canaries in the coalmine. If we have fish collapse, then we know we have a serious issue. There is no suggestion this is an issue at this time.

9. NEXT MEETING

The next regular meeting of the Okanagan Basin Water Board will be held on June 1, 2010, at the Regional District of Okanagan-Similkameen.

12 ADJOURNMENT

Moved by Director Clark

“THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of May 4, 2010 be adjourned at 1:22 p.m.”

CARRIED

Certified Correct:		
Chair		Executive Director

DRAFT

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
June 1, 2010
Agenda No: 6.1

File No. 0550.04

To: OBWB Directors
From: Anna Warwick Sears, Executive Director
Date: May 25, 2010
Subject: Executive Director Report

Reservoir Lots Moratorium

The provincial moratorium on the sale of recreational lease lots on Okanagan drinking water reservoirs is scheduled to end this summer. The attached article on Lake Country's effort to expand their reservoir storage illustrates that this is still a significant controversy. Given that the Water Supply & Demand Project climate change scenarios indicate that we will have decreased snow storage and that we will rely more heavily on reservoir storage for both irrigation and environmental flows, it is a good time to renew our correspondence on this matter to the province.

WATER SUPPLY & DEMAND RECOMMENDATION TO WAM:

Protection of upland water supply reservoirs

Many water storage reservoirs have been constructed on the upland plateau on the west and east sides of the Okanagan valley. These storage reservoirs trap spring runoff and store it for later release to support irrigation and indoor uses in the lower valley during the summer. Future winter snowpacks are likely to be smaller and to melt earlier than at present. In addition the irrigation season is likely to become longer. These factors will challenge the operators of these storage reservoirs to continue to supply water through the irrigation season.

The Working Group recommends that a modernized Water Act provide protection of these important water sources, by allowing water suppliers to maintain guaranteed access to these reservoirs and the surrounding land base for reservoir operation and potential expansion, for the purpose of continuing to provide reliable water supplies.

Staff recommendation: That the OBWB write a letter to the minister in charge of the reservoir lots file, and renew our recommendations on the non-sale of these parcels.

Basin-wide Drought Planning

The OBWB received a \$10,000 grant from the Ministry of Community and Rural Development to develop the technical framework for our basin-wide drought plan (see correspondence). This framework overlays the existing licence priority system (first in time, first in right) with the hierarchy of stream-flow (north to south in the basin). The study will also likely consider the location of sensitive streams that may have default priority under the

provincial and federal fisheries legislation. The new funding provides a match to the existing funds received for this project under the BC Regional Adaptation Collaborative (BC-RAC).

Stormwater Workshop

The OBWB's workshop "From Rain to Resource – Innovations in Stormwater Management" is scheduled for Oct. 28-29, 2010, in Kelowna. The workshop is co-organized with the help of the BC Water and Waste Association, and focuses on policy and technical solutions for BC, using Okanagan examples. There are two sessions "streams," one for decision makers, and the other for municipal staff, with plenary sessions where both groups come together. This workshop received funding from the BC-RAC.

Water Supply & Demand Project Update

The final technical report for the Water Supply & Demand Project - Phase 2 (WSDP) will be completed and released this month. The report fleshes out the results released at our event on March 26, and contains detailed technical appendices of the studies. The web reporting tool is still experiencing delays due to technical programming issues. We will be revamping the WSDP portion of our website to make all water supply and demand information easier to access. This month we will be working to begin the move of data and systems to the OBWB/RDCO.

As it has taken longer than expected to complete the final report, we have had to delay our planned workshops and consultation sessions to decide which additional future scenarios are needed under Phase 3. We received funding to undertake additional scenarios through the BC-RAC. I hope to hold a special OBWB scenarios session at our July board meeting.

Eurasian Watermilfoil Program Update

We will be pulling machines during the last week of May, and first week of June, and will do the end of rototilling season maintenance prior to beginning the harvesting season. We are planning to conduct milfoil re-growth surveys during the beginning of July, depending on the water temperatures and weed growth. We will be using maps of treatment areas to determine a per-hectare cost of treatment, and develop a system to compare across years and with treatment costs in other areas such as Christina Lake.

Lessons from Australia

I will be giving a PowerPoint presentation on my recent water policy exchange to Australia. Although they are working at a much greater geographic and fiscal scale than we are, most of the OBWB's programs and projects are consistent with drought-proofing efforts Down Under. With respect to the issues in this ED report, development (and even recreational use) around reservoirs in New South Wales is strongly discouraged, they have been diligent with creating watershed-based drought plans, and are actively promoting stormwater management practices that use the rain as a resource. They have also undertaken a very extensive water modeling project similar to our own, and have many great water

conservation communication tools we can borrow from. It was also interesting to learn where we are ahead – in water demand modeling, and in some of our communication mechanisms with water utilities, member organizations of the Okanagan Water Stewardship Council, and other stakeholders.



On the main highway out of Canberra, the capital city of Australia.



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Cabin owners opposed to Lake Country's damming plan

By [Jason Luciw - Kelowna Capital News](#)

Published: **May 21, 2010 10:00 AM**

Updated: **May 21, 2010 10:09 AM**

A plan to dam Beaver, Crooked and Oyama Lake reservoirs above Lake Country is riling cottage owners who lease land along their shores.

Okanagan Cottage Owners' Association president Lloyd Manchester told the Central Okanagan Regional District board Monday night that his group is opposed to the District of Lake Country's plan primarily because of potential environmental impacts.

"Islands on Beaver Lake would be under water," began Manchester.

"Biologically we're not sure of all the damage that would be done. It would certainly damage some of the wetlands that exist on Crooked Lake."

Manchester noted damage to wetlands would be irreparable.

"Once they're flooded, they're gone," he told the board.

Loss of wetlands would affect moose, beaver and muskrat and varieties of endangered toad and salamander species, Manchester explained.

He also said Lake Country had not yet adequately studied what harm the damming could cause.

"The (B.C.) Ministry of Environment, in just recently talking to them, is saying that Lake Country has not supplied sufficient information on which to make an adjudication of their application.

"Therefore, they need more information, more hydrology, more studies like this to show what's going to happen, what are the environmental impacts (and) what are the mitigation costs."

Lake Country Mayor James Baker stated his municipality would be doing studies to address concerns like those Manchester brought up.

"You could have saved us some money if you told us you were doing it," said Baker, tongue in cheek.

Baker mentioned his municipality applied to the B.C. government for permission to dam Beaver and Oyama Lake chains to increase the stores in the reservoirs.

The move is necessary because, as trees die from pine beetle kill, run off would happen faster each year and the freshet would need to be retained for supplies for the remainder of the year.

He also noted that climate change would make it necessary to store more water and better control streams like Vernon Creek, which would run dry half the year if flows were not managed.

However, Manchester noted that the exercise would only add 10 per cent to Lake Country's domestic water stores.

The regional board opted to take neither side in the debate, simply choosing to receive maps and information Manchester provided.

However, Baker did tell the board later in the evening what might be motivating the cabin owners to oppose Lake Country's plan.

In August, the province is due to lift a moratorium on the sale of Crown lease lots on reservoir lakes.

"The presentation by the cottage owners' association is because, and (Manchester) did mention, the moratorium is coming off, where fee simple (ownership) may be the case on those reservoir lots," continued Baker.

"The province may take into their heads to sell, to put some money into their coffers. So it is an issue. And it is something we're still opposing."

Lake Country has opposed the lot sales, fearing that the municipality would need to purchase portions of the properties in the future, at great cost to taxpayers, to raise reservoirs.

Manchester had told the board that his association would again be pursuing purchase possibilities.

"We'll be seeking support to buy our cabins and we'll be back with more information then," said Manchester.

jluciw@kelownacapnews.com

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Find this article at:

http://www.bclocalnews.com/okanagan_similkameen/kelownacapitalnews/news/94596284.html

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
June 1, 2010
Agenda No: 6.4

File No. 0550.04

To: Board of Directors
From: Nelson R. Jatel, Water Stewardship Director
Date: May 25, 2010
Subject: **Water Stewardship Director's Report**

This memo provides an update on some of the ongoing activities of the OBWB's Water Management Program.

1. WATER STEWARDSHIP COUNCIL, TECHNICAL ADVISORY COMMITTEE

A Stewardship Council report highlighting the regular May meeting is attached. The May council meeting had presentations on the subject of water economics from three guest speakers: Dr. **Ron Griffin** (Texas A&M University), Dr. **Henning Bjornlund** (University of Lethbridge) and Dr. **John Janmaat** (University of British Columbia-Okanagan). A pilot to develop a multi-media library of contemporary speakers on water issues started with the taping of the three presentations. The presentations will be available on the OBWB website in mid-June.

The next council meeting will be in Kelowna (4087 Casorso Rd.) on June 10, from 12:30 p.m. to 4 p.m. Dr. **Jim Stronach** will be presenting two physical limnology models (Deep Lake Limnology and Foreshore Limnology Models) developed by Hay and Company for the City of Kelowna, a \$300,000 investment. The presentation will in part tell the story of Okanagan lake water movement in the depths, on the surface and along the foreshore.

2. PROJECT UPDATES

2.1. Streamlined Water Use Reporting Tool

The Streamlined Water User Reporting Tool (SWURT) – Okanagan Pilot project is continuing to move ahead smoothly under the direction of the steering committee co-chaired by Dr. Wenda Mason and Mr. Nelson Jatel and with development by our consultants, Spot Solutions Inc.

This month the consultants integrate the feedback from the first two workshops with Okanagan water suppliers and provincial water data users to develop a working prototype Internet-based water use reporting tool.

On May 26, Okanagan water suppliers will have an opportunity to review the prototype and provide feedback. A second meeting with provincial government water data users on June 3, will provide for further feedback. All information from these two meetings and the previous information sessions support the completion of Phase I of the project with an anticipated completion date of June 30. The deliverables for Phase I include: (1) a full reporting tool prototype that is easy to use and meets the provincial data needs as well as the OBWB's supply and demand modeling needs; and (2) a

design/build project plan to be implemented in the build-out of the web-based reporting tool in Phase II.

This web-based reporting tool project is a partnership between the OBWB and senior levels of government to record monthly water use by large volume water users (surface and groundwater) in the Okanagan watershed. This information is critically important to support drought planning and provide improved supply and demand modeling for the basin.

2.2 2010 Okanagan Water Supply – Water Management Support Webinar

The next webinar is scheduled for the week of June 7th – final date/times subject to panel member availability.

2.3 Phase 1 Okanagan Remote Sensing Project: Scoping Document and Project Charter

In partnership with the North Central Washington Resource Conservation and Development Council (RC&D) the OBWB is exploring the opportunity to use remote sensing (RS) data from NASA and CSA to improve water forecasting in the Okanagan Basin. By incorporating RS data, hydrological models used to support water management in the basin can be improved, leading to more effective water management that will benefit both Canada and the US.

A project stakeholders meeting was hosted by the RC&D in Chelan, Wash. on May 20. The meeting was well-attended and U.S. project partners continue to show strong support for this initiative.

A draft Scoping Document and Project Charter report has been developed and is set to be finalized in early June. The report document investigates the opportunities to use RS-based data and to outline a work program to make use of RS-based data to improve the Okanagan Basin Hydrology Model. The report includes: (1) a scoping document that identifies gaps in the Okanagan Basin Hydrology Model, and identifies opportunities to fill those gaps using RS data; and (2) a project charter that lays out a work plan for incorporating RS data into the model to improve the calibration achieved with conventional ground-based information.

Two funding proposals to NASA are under development and are anticipated to be submitted to NASA through our partners at the RC&D office in June (Terrestrial Hydrology Program) and in July (Climate Change Program). The funding proposals will focus on applying space-based RS to improve current modeled estimates of snow pack water equivalence, expand the Mike She hydrologic model to the Similkameen and US Okanogan, and develop a demand model for the entire project footprint.

Proposed project partners include: National Aeronauts and Space Administration (NASA), Canadian Space Agency (CSA), Pacific Northwest National Laboratory, Natural Resources Canada, Environment Canada, University of Washington, University of British Columbia. The proposed scope of work is proposed to be developed over a five-year work plan.

Water Stewardship Council

Technical Advisory Committee of the Okanagan Basin Water Board



Council Members (2009-10):

o Interior Health	Rob Birtles
o UBC Okanagan	Bernie Bauer (chair)
o Okanagan Collaborative Conservation Program	Carolina Restrepo-Tamayo
o BC Fruit Growers Association	Lorraine Bennest
o Environment Canada	Alan Boreham/ Daniel Millar
o Okanagan Nation Alliance	Gwen Bridge/ Howie Wright
o BC Agriculture Council	Hans Buchler
o MOE, Water Stewardship Division	Ken Cunningham
o OCEOLA Fish and Game Club	Lorne Davies / Aron Chatten
o Agriculture and Agri-Food Canada	Doug Edwards / Kirby Rietze
o BC Groundwater Association	Doug Geller
o Canadian Water Resource Association	Brian Guy
o BC Cattlemen's Association	Lee Hesketh
o Water Supply Association	Bob Hrasko
o Regional District of North Okanagan	Anna Page / Anthony Kittel
o Community Futures	Don Main
o MOE - Fish and Wildlife Science	Steve Matthews
o Osoyoos Lake Water Quality Society	Mark McKenney
o Agriculture Canada PARC / PFRA	Denise Neilsen
o Urban Development Institute	Bal Poonian
o CORD Environmental Advisory Committee	Chris Radford
o Shuswap Okanagan Forestry Association	Kerry Rouck
o Regional District of Okanagan-Similkameen	Jillian Tamblin
o Ministry of Agriculture and Lands	Ted van der Gulik (vice-chair)
o City of Kelowna Water Conservation program	Mark Watt / Don Degen
o Okanagan College	Douglas MacLeod

Regular Monthly Meeting Highlights – May 2010

Excerpts from Council Member Reports*:

- Phase 1 of a large scale river restoration project in the South Okanagan – 10 years in the making – is done. The work became necessary because of development in the area. Okanagan Nation Alliance was a big partner on this. A ceremony is planned for June 5, 11 a.m. to noon.
- Phase 2 of the Okanagan Water Supply and Demand project is drawing to a close after three years. A technical summary of the project is almost complete and should be finalized by the end of the month.
- RDOS has had some interesting applications come in including one where someone has applied to have their land moved into the Agricultural Land Reserve in order to get water for their grapes.
- Last week the RDNO board passed a recommendation for a Shuswap River management plan.
- OBWB staff reported that they're very happy to have Melissa Teche and Amanda Cadorette join the agency to help launch the Okanagan WaterWise program. The OBWB is looking to hold meetings with various groups throughout the Okanagan to make sure there is no duplication but that we are working together to deliver an effective water conservation and protection message.
- Dr. Janmaat's research project on Kelowna water pricing has received water survey results from over 300 Kelowna households and are now looking forward to seeing the results.

* For full report summary see attached council meeting minutes (May 13).

Presentations & Policy Review:

Topic: Water economics

Dr. Ron Griffin (University of Texas)

Dr. Henning Bjornlund (University of Lethbridge)

Dr. John Janmaat (University of British Columbia-Okanagan)

Recommendations / Action:

Within the context of the Okanagan Sustainable Water Strategy, continue to explore contemporary water topics relevant to support the development of an Okanagan Basin drought plan.

Membership

The Okanagan Water Stewardship Council is a broad-based advisory body, representing a range of water stakeholder groups and local sources of technical expertise. Council members are nominated for 18-month terms by their respective organizations, and these nominations are ratified by the OBWB.

Board members are encouraged to attend monthly Stewardship Council meetings. For more information contact: Nelson Jatel, Water Stewardship Director.

nelson.jatel@obwb.ca

o. (250) 469-6295

OKANAGAN WATER STEWARDSHIP COUNCIL

A Technical Advisory Body to the Okanagan Basin Water Board

MINUTES OF A MEETING HELD ON THURSDAY, MAY 13, 2010, AT THE KELOWNA AND DISTRICT FISH AND GAME CLUBHOUSE, 4087 CASORSO ROAD, KELOWNA, BC

COUNCIL MEMBERS:

Present

UBC Okanagan	Bernie Bauer, Chair
Agriculture & Agri-Food Canada, Research Branch	Denise Neilsen
BC Agriculture Council	Hans Buchler
BC Fruit Growers Association	Lorraine Bennest
BC Ground Water Association	Doug Geller
Canadian Water Resources Association	Brian Guy
Ministry of Environment, Water Stewardship	Conrad Pryce (alternate)
Ministry of Environment, Fish and Wildlife Science	Steve Matthews
Oceola Fish and Game Club	Lorne Davies
Okanagan College	Douglas MacLeod
Okanagan Nation Alliance	Gwen Bridge
Osoyoos Lake Water Quality Society	Mark McKenney
Shuswap Okanagan Forestry Association	Kerry Rouck
Regional District North Okanagan	Laura Frank (alternate)
Regional District of Okanagan-Similkameen	Jillian Tamblyn
City of Kelowna	Mark Watt
Water Supply Association of BC	Toby Pike (Alternate)

Regrets

BC Cattlemen's Association	Lee Hesketh
Community Futures	Don Main
Environment Canada – Pacific & Yukon Region	Dan Millar
Interior Health Authority	Rob Birtles
Ministry of Agriculture and Lands	Ted van der Gulik, Vice Chair
Okanagan Collaborative Conservation Program	Carolina Restrepo-Tamayo
Regional District of Central Okanagan	Chris Radford
Urban Development Institute	Bal Poonian

STAFF:

OBWB, Water Stewardship Director	Nelson Jatel
OBWB, Office and Grants Administrator	Genevieve Dunbar
OBWB, Communications and Research Coordinator	Corinne Jackson
OBWB, Outreach and Education Assistant	Amanda Cadorette
OBWB, Outreach and Education Assist./O&G mat Iv.	Melissa Teche

GUESTS:

University of Lethbridge / University of South Australia	Henning Bjornlund
Texas A&M University	Ronald Griffin
UBC Okanagan	John Janmaat
Astral Media (AM1150)	Phil Johnston
BC Agriculture Council	Christine Dendy
BC Fruit Growers Association	Denise MacDonald
Global Television (CHBC)	Klaudia Ceglarz
Kelowna Capital News	Judie Steeves
Lake Country Environmental Society	Carmen Stanek

1. CALL MEETING TO ORDER

Chair Bauer called the meeting to order at 12:59 p.m. and welcomed members and guests.

Mr. Jatel provided an update on some of the programs the OBWB is currently working on. The Water Board is working with Brian Guy of Summit Environmental and Insight Environmental's Kellie Garcia to develop an application to NASA to do some remote sensing that will look at environmental flows, but also how it can help fish habitat. A meeting to discuss the proposal is planned for May 20 in Washington with project partners and stakeholders.

Dr. Bauer noted that he is also assisting on a project that is aimed at connecting social science to local water users (water overseers, planners, etc). There will be a series of discussions and keynote speakers in late August, early September. It will be held simultaneously at University of Victoria, University of Northern BC, and UBC-O.

2. PRESENTATIONS

Dr. Ronald Griffin, Water Resource Economist, Department of Agricultural Economics with Texas A&M University
Water Economics

Dr. Griffin began his presentation noting that it is hard to cajole people into doing the right thing. However, water markets (WM) – the selling and trading of water rights, create a number of benefits, including allowing people to adjust, he said.

WM enable appropriate growth to continue, it curtails the need for water supply development and the value of water is revealed, added Dr. Griffin.

In the case of Texas, which borders on three other states and Mexico, it became important to know what they had to be able to share water across the boundaries. This is where WM were useful.

The case of Lower Rio Grande Valley

The need for water markets was revealed after a lawsuit was filed between water systems. It took 15 years to settle and led to the market system. Municipal rights have the priority to a certain volume per year, and agricultural rights come after, sharing what's left over. There is strict monitoring, Dr. Griffin added.

In the Lower Rio Grande Valley, sales and leases of water are common. WM have enabled tremendous population growth but there have been no new reservoirs required in decades. Less than 80% of water rights are now dedicated to urban use and this has created no problems, Dr. Griffin continued.

Another area of contention that had to be addressed was groundwater, where overlying landowners had largely unlimited water access and where recharge to the aquifers was unreliable. The issue was further complicated in the context of the Endangered Species Act and with the need to protect the animals that relied on groundwater sources. As a result, a new authority was struck and people had to submit information showing how much they had been drawing so that the authority could quantify water use. Today, sales and leases are common.

Dr. Griffin suggested that for a water scarce region, the Okanagan is not walking the talk. He said that he wasn't sure if the area was ready for water markets and allowing water transfers when so many are still on a flat rate system. He then asked what we're going to do if not water markets and noted that something will have to be done.

Dr. Henning Bjornlund, Canada Research Chair in Water Management and Policy with University of Lethbridge / Assoc. Research Professor with University of South Australia
Water Markets in Okanagan – Equity and Economic Efficiency

As a result of climate change, we are going to see warmer winters and warmer drier summers. In turn, this will result in increased demand for crop water. There will also be less snow and more precipitation.

Scarcity is going to be an issue, stated Dr. Bjornlund.

The Okanagan has time to think about its actions, unlike Australia which had to act in a reactive, panicked way, he noted.

The challenges facing the Okanagan, said Dr. Bjornlund is the dominance of capital intensive plantings that are dependent on water (e.g. grapes, etc.). Also, the region's economy is heavily dependent on water quality and flow for recreation, lifestyle and tourism.

Conflicts over scarcity are inevitable, said Dr. Bjornlund, predicting that this will come to a head in 10 to 15 years and we will have to make some hard decisions. Adaptive and robust institutions are needed now to deal with future allocation issues, he suggested.

The WM system – having buyers and sellers – is considered the best way to make hard decisions. But to work, one must define what waters are not allowed to be traded. Water is an emotional issue and there will always be opposition, he warned, but added there is no risk to human rights.

In order to introduce water markets, Dr. Bjornlund suggested, one must: 1) develop an adaptive planning processes involving key stakeholders, 2) define protected water to secure environmental and other public interests; 3) define the consumptive pool of water; 4) introduce markets in water – permanent long term ownership, as well as short term use, and 5) reform water right structures to maximize market operations based on priority or proportional access – or a mixture.

Locally sensitive solutions are necessary, he added. However, it is inevitable so it's better to start now.

Dr. John Janmaat, Environmental/Resource Economist, Appointed Chair of Water Resources and Ecosystem Sustainability with UBC – Okanagan
First in Time, First in Right – What does it mean for the Okanagan?

FITFIR means whoever has the earliest licence has the first right to water allocation, Dr. Janmaat explained. It is a water allocation system and it would be used in a drought situation, so we do have something in place. However, there are some interesting implications with this system that people need to be aware of, he added.

The whole Okanagan is connected. So under the current system, if we are in a drought situation, a senior licence holder downstream will have priority and any junior licence holder upstream would be required to yield to meet the downstream senior licence holder's needs.

Water uses have been prioritized, noted Dr. Janmaat, adding that his research shows that agriculture is senior and institutional use is at the bottom, most likely because it holds the most junior licences.

The province is currently modernizing its Water Act and some people have come out saying we need to keep FITFIR. However, under FITFIR, Dr. Janmaat said his study shows that Osoyoos will always have water since it has senior licences. Oliver on the other hand could be forced to reduce water use early to ensure Osoyoos gets what it is legally entitled to. Is this fair, he asked.

FITFIR is a drought management system, but we need to ask if the results are what we want, Dr. Janmaat said. Do these results make the best use of water when it is scarce? Is there an acceptable alternative? These are the types of questions that need to be considered, he concluded.

In response to the presentations, Mr. Buchler said he is uncomfortable with water being owned by an individual and that it belongs to the ecosystem as a whole. Dr. Bjornlund said that it is best to sort out such issues before we are in a panic over water. If we want agriculture preserved this needs to be agreed to at the beginning.

Dr. Griffin assured Mr. Buchler that that there will always be water to drink. Drinking water accounts for such a small proportion of what we use, it doesn't actually figure into water allocation, he added.

Dr. Janmaat responded, saying that we're not in a crisis situation right now, but it could be in the future. The question is do we like the current system of allocating what is left or do we want to change it, he noted.

Mr. Buchler went on to say that water markets are not in the interest of ecosystems and human rights and will make it difficult for people who are disadvantaged. Dr. Bjornlund said that he suggests that those rights be looked after first, but that WM are a mechanism to use the water that is available for use.

In response to questions around FITFIR versus WM, Dr. Bjornlund said that with WM one can pay people out for their licence. Under FITFIR there will continually be junior licences as well as unused licences and over allocation.

Ms. Tamblyn asked if WM allow environmental and social needs to be addressed first. Dr. Griffin responded that Texas has adopted drought triggers. So when a well reaches a certain elevation that might threaten various needs, everyone's water allocation drops down a certain amount to look after spring flows. Based on the current system in Texas, there will be additional stress on the environment but that's not a problem with WM but with the way the WM was designed, added Dr. Griffin, saying that planners can make sure that the environment is cared for from the outset.

Dr. Neilsen said she disagrees with using water as a tool to determine what crop should be grown. The province has an Agricultural Land Reserve, and we know what our water requirements are. A market tool to correct behaviour is unnecessary, she said.

Ms. Bennest added that limits are already in place based on the economic value of a crop, and the type of land you have.

If we get into selling off water, said Dr. Neilsen, we could end up limiting what we can grow.

Dr. Janmaat responded saying it is still important to determine how we move water around. The ALR is not stagnant – land does get removed. Much of the region's water is not allocated, but what happens in 35 years when the snowpack is low, we don't have water storage and we are facing population growth, he asked.

Mr. MacLeod asked about the possibility of speculators, in the event of a drought, selling water rights at inflated prices to a municipality. Dr. Griffin responded that municipalities are interested in risk aversion and already own water licences and are not normally looking to purchase water rights when there is already a drought. Generally they overinvest in water rights to make sure they are covered in times of drought, he added. On the flip side, municipalities are usually not interested in leasing their own water rights when they have an opportunity to do so and make some of their money back, Dr. Griffin added.

Mr. Pike noted that scarcity is what drives water markets. In the Okanagan, the sub-basins are challenged by various water availability. The South East Kelowna I.D. Board of Trustees struggles with our willingness to sell water to our neighbours, but then what if there is no guarantee of water next year. We see that by holding onto water not being used this year, it is available to us for next year. Dr. Griffin said internal transactions work and in water short years, lease prices go up. Where it is difficult though, is leasing between districts he added.

3. ADOPTION OF MINUTES

3.1 Minutes of a regular meeting of the Okanagan Water Stewardship Council held April 8, 2010, at Kelowna and District Fish and Game Club clubhouse, Kelowna

Moved by Denise Neilsen

Seconded by Doug Geller

“That the minutes from the April 8, 2010 meeting of the Okanagan Water Stewardship Council be approved.”

CARRIED

4. ROUND TABLE – MEMBER UPDATES

Council members provided an update on their organization’s activities.

- Mr. Matthews: Phase 1 of a large scale river restoration project in the South Okanagan – 10 years in the making – is done. The work became necessary because of development in the area. Okanagan Nation Alliance was a big partner on this. A ceremony is planned for June 5, 11 a.m. to noon.
- Dr. Neilsen: The CWRA conference is all set for Vancouver in June. Please register.
- Dr. Guy: Phase 2 of the Okanagan Water Supply and Demand project is drawing to a close after three years. A technical summary of the project is almost complete and should be finalized by the end of the month. A significant portion of this year’s CWRA conference will look at the OWSD study.
- Ms. Tamblyn: We’ve had some interesting applications come into RDOS. One was someone wanting to have their land into the Agricultural Land Reserve in order to get water for their grapes. The application was supported because they wanted to see the land go to agriculture instead of development, however the area is environmentally sensitive and so this is one way of getting around our requirements to address environmental sensitivity.
- Ms. Frank: Last week the RDNO board passed a recommendation for a Shuswap River management plan.
- Mr. McKenney: We’ll be hosting a town meeting in Osoyoos May 20 on the OWSD study at 7 p.m. We have been advertising the meeting on both sides of the border and are hoping for a strong turnout.
- Ms. Jackson: We’re very happy to have Melissa Teche and Amanda Cadorette join us to help launch the OK WaterWise program. We are looking to hold meetings with various groups throughout the Okanagan to make sure there is no duplication but that we are working together to deliver an effective water conservation and protection message.
- Dr. Janmaat: We have received water survey results from 300 Kelowna households and are now looking forward to seeing the results.

Mr. MacLeod exited the meeting.

5. NEW & UNFINISHED BUSINESS

5.1 Ministry of Environment – Drought Planning update

Mr. Price gave an update on the province's Drought Management Plan, noting that the province is looking to work more closely with the OBWB as part of its plan in the Okanagan.

In 2009, the ministry identified key streams that may experience drought, what activities were necessary and who was responsible. This year, for the first time, the province is looking at levels of drought. There are four stages that would be used to determine actions that are necessary to address drought.

As drought conditions worsen, the province will look at what impact it might have on fish, the number of licensees affected, the type of crops impacted, the economic impact to agricultural users and types of regulation that can be expected.

The OBWB's drought webinars this year have resulted in a better sharing of information between purveyors, municipalities, the provincial and federal government, noted Mr. Price. And, he added, kudos to purveyors like SEKID and GVWS which have initiated water restrictions in anticipation of drought conditions.

Ms. Tamblyn noted that it is interesting to hear so many people talking about the water situation this year, people who would not normally be so aware.

Mr. Pryce responded saying most people will cut back their water use if they know there is an issue, but communication is going to be important.

Ms. MacDonald added that this communication needs to reach farmers, but it can't come from government staff. It should be students, or someone who they can relate to better.

Mr. Davies noted that there seems to be a disconnect between the irrigation districts where people in some areas don't seem to realize the current water situation and that some areas are already on water restrictions. Better communication will help address this.

5.2 Hydrometric monitoring sub-committee

Mr. Jatel reported that the board is interested in improving hydrometric monitoring in the Okanagan. However, it was mentioned at a recent conference in Whistler that hydrometric monitoring is supposed to be cut this year.

The Stewardship Council's subcommittee that is looking into this matter for the board will be meeting in the coming weeks and will be talking with the province about the importance of such monitoring in this region. The subcommittee will also be looking at other directions it can go in to increase the number of monitoring stations.

5.3 Project updates: NASA initiative / Streamlined Water Use Reporting Tool (SWURT)

Mr. Jatel said that Mr. Guy is looking at how remote sensing can complement some of the hydrometric monitoring needs we have in the Okanagan. There are some opportunities to pursue.

Mr. Guy added if we can improve our OWSD models with remote sensing data that could be very valuable.

6. NEXT MEETINGS

The next meeting of the Okanagan Water Stewardship Council will be held June 10, 2010 at Kelowna and District Fish and Game Club clubhouse. Guest speaker Dr. *Jim Stronach* will be

presenting some of the findings from his limnology work on Okanagan Lake, in part telling the story of the lakes water movement in the depths, on the surface and along the foreshore.

7. ADJOURNMENT

The meeting was adjourned at 4:53 p.m.

Moved by Lorraine Bennest

“That there being no further business, the meeting of the Okanagan Water Stewardship Council of May 13, 2010 be adjourned.”

CARRIED

CERTIFIED CORRECT:

Chair

Executive Director

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
June 1, 2010
Agenda No: 6.3

File No. 0550.04

To: OBWB Directors
From: Genevieve Dunbar, Office and Grants Administrator
Date: May 21, 2010
Subject: **Board Administration**

Staff is working to coordinate and plan events through summer 2010 and would like to confirm dates for upcoming regular OBWB meetings and our second Annual General Meeting.

Currently the 2010 board meeting schedule indicates regular meetings on:

- Tues., July 6 at Regional District North Okanagan
- Tues., Aug. 3 at Regional District Central Okanagan
- Tues., Sept. 7 at Regional District Okanagan Similkameen

The meetings in both August and September fall directly after a statutory holiday (BC Day and Labour Day respectively). At times in the past, the OBWB has taken a hiatus for the month of August in part due to the meeting falling directly after the BC Day long weekend, but also due to summer vacation schedules and a typical reduction in the quantity of board business at that time of year. We would like to know the board's preference on the proposed meeting schedule.

In addition, staff would like to plan for the second OBWB Annual General Meeting; our first AGM was held on Fri., Sept. 18, 2009 at the Creekside Theatre in Lake Country. The proposed date for our 2010 AGM is Fri., Sept. 10, location to be determined, from 9 a.m. to noon (same as last year). Please let staff know about any potentially conflicting events or other considerations.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
June 1, 2010
Agenda No: 6.4

File No. 0550.04

To: OBWB Directors
From: Corinne Jackson
Date: May 25, 2010
Subject: **Communications and Research Coordinator Report**

Update on Okanagan WaterWise

We're very pleased to have our full complement of Okanagan WaterWise staff, with Melissa Teche having now joined Amanda Cadorette and myself.

It's been a busy month for Okanagan WaterWise, looking at various outreach and education tactics to test the market and the message with a soft launch, but also strategizing for long-term sustainability and success of the program.

This past month has been spent developing and previewing the Okanagan WaterWise website, making sure we're happy with it before it launches. The team has also been busy preparing for the Mayor's Environmental Expo (May 28 in Kelowna) with a children's activity station promoting water conservation, an educational display, and other materials. We are also reviewing what other events are happening around the Okanagan this summer where we can set up a table and spread the WaterWise message (e.g. Kelowna's Fat Cat Festival).

The team has met with Think Marketing to develop a series of posters that will be aimed at reaching residents, students, and the business community, raising awareness around water quantity and quality in the valley. These posters will be used at various outreach events, but can also potentially be used at bus shelters and on the sides of buses. The posters will also help in the development of banner ads to run on Internet sites like *Castanet*. Think is also assisting us with the use of popular social media sites and have helped set up Facebook (FB) and Twitter accounts. Staff members are in the process of developing the FB profile to ensure maximum effectiveness in promoting the OKWaterWise message.

In developing long-term sustainability and success, the team is meeting with various agencies in the valley to discuss partnership opportunities, to reduce duplication as the program rolls out, and determine how Okanagan WaterWise can help provide a consistent, valley-wide water preservation message. Meetings are scheduled with water sustainability program staff at RDNO, City of

Kelowna, and City of Penticton. We are also looking at setting up additional meetings with RDCO's Waste Reduction Office, Fresh Outlook Foundation, and others.

Update on other communication activities

A news release was issued May 4, jointly between UBC-O and the OBWB, regarding the Endocrine Disruptor Compounds study. The story was covered matter-of-factly and carried by *CHBC-TV*, which then posted it to its sister stations, *Global Toronto* and *Global Regina*. It was also covered by the *Kelowna Capital News* and *Daily Courier*.

On May 13, a news release was issued regarding a video library being created to be posted to the OBWB website. The virtual library will include presentations by water experts on contemporary water issues of importance to the Okanagan valley. *CHBC-TV, AM 1150* and the *Kelowna Capital News*, attended the first taping and reported on the various speakers. The story was also picked up by the *Vernon Morning Star*. *Castanet* has asked to be informed when the videos are up on the website so they can inform their readers.

Finally, a news release was issued May 27, regarding a grant from the province to help develop a basin-wide drought plan. Coverage that followed this release will be noted in next month's board report.

Included below, please find a listing of recent news clippings regarding the work of the Okanagan Basin Water Board and presentations by OBWB staff.

Summary of Recent Media

May 4	"Estrogen pollution content in OK Lake undetectable," <i>Kelowna Capital News</i>
May 4	"OK hormone levels in Okanagan lakes," <i>CHBC-TV, Global Toronto</i>
May 9	"Low-level estrogens found in waste water," <i>Kelowna Daily Courier</i>
May 11	"Region braces for potential drought," <i>Penticton Western News</i>
May 13	"Depleting Okanagan water supply discussed," <i>AM 1150</i>
May 14	"Okanagan communities tap into funding," <i>Penticton Western News</i>
May 14	"Water grant goes down the drain," <i>Kelowna Capital News</i>
May 16	"Trade-sell scheme applauded," <i>Kelowna Capital News</i>
May 16	"Presentations videoed for the Net," <i>Kelowna Capital News</i>
May 16	"Planning for reduced water use in Okanagan starts early this year," <i>Kelowna Capital News</i>
May 16	"Dealing with drought," <i>CHBC-TV</i>
May 25	"Water rights in sights," <i>Vernon Morning Star</i>

Summary of Upcoming Presentations

June 3	<u>BC Ministry water information users</u> : Streamlined Water Use Reporting Tool - prototype website design (Mr. Jatel)
June 9	<u>Ogopogo Rotary</u> : Update on Okanagan Water (Dr. Warwick Sears)

- June 17 Canadian Water Resources Association National Conference: The Water Supply & Demand Project - How the Okanagan is preparing for climate change (Dr. Warwick Sears)
- June 19-20 A variety of U.S. project partners: NASA remote sensing to support the Okanagan Supply & Demand model and hydrometric monitoring (Mr. Jatel)

Recently Delivered Presentations

- May 5 BC Water and Waste Association Annual General Meeting: Climate Change Workshop – The Water Supply & Demand Project (Mr. Jatel)
- May 8 North Okanagan Naturalists Club: Building Partnerships – how local non profits and the OBWB can work together (Ms. Dunbar)
- May 12 Okanagan Collaborative Conservation Program Annual General Meeting – Okanagan Supply and Demand Project (Mr. Jatel)
- May 20 Osoyoos Lake Water Quality Society: Update on OBWB and OWSD study (Dr. Anna Warwick Sears & Mr. Stu Wells)
- May 26 Canadian Environmental Grantmakers' Network: Using water grants to improve water management practices in the Okanagan (Dr. Anna Warwick Sears & Ms. Dunbar)
- May 26 Okanagan Water Utilities: Streamlined Water Use Reporting Tool - prototype website design (Mr. Jatel)

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
June 1, 2010
Agenda No: 7.1

File No. 0550.04

To: OBWB Directors
From: Anna Warwick Sears, Executive Director
Date: June 1, 2010
Subject: Sewage Facilities Grant to City of Vernon

In December 2007, the OBWB approved a grant to the City of Vernon (COV) for upgrades to their sewage treatment plant completed in 2004. The OBWB program provides 18 per cent of debt costs for sewerage facilities servicing neighborhoods built before 1978. COV had been eligible for a grant at the time of construction, but did not begin the application process until 2007.

Moved by Director Hobson

Seconded by Director Reid

"That the Board approve funding for the eligible costs of grant requests from the City of Vernon for 1) Liquid Waste Treatment Plant upgrade and 2) Septic Removal Program"; and from the City of Penticton for 1) Septic Waste Receiving Facility, 2)Industrial Neighborhood Sewering, and 3) Liquid Waste Treatment Plant upgrade.

CARRIED (December 7, 2007)

The Board did not approve a request that the grant be made retroactive to 2002 (which is against the terms of reference for the grant program), but began requisitioning in FY 2008-2009 for an amount estimated by COV to cover eligible costs. There were delays with finalizing the application because it took time for COV staff to determine the proportion of the project serviced old development; but the application is now complete. I recommend that the OBWB reconfirm the Vernon grant at the funding level given below.

The grant request is for \$118,234.43/year, making payments to cover debt-servicing for COV's three MFA notes. As we began to requisition for this project in April 2008 (funds held in reserve until the application was finalized), I recommend that the City of Vernon receive one lump-sum payment of \$236,468.86 (\$118,234.43 x 2) for the fiscal years 2008-09 and 2009-10. A regular annual payment will be disbursed on receipt of invoice, once our 2010-2011 requisition has been received.

The OBWB sewerage facilities grants are generally tied to 20-year MFA notes, primarily to avoid large, shorter-term payments. In this case, COV has taken out 25-year notes expiring in 2027, 2028, and 2030, and their grant request is based on this extended amortization period. I recommend that the OBWB allow the grant to pay over the full 25 year period.

Recommended motion: *That the OBWB reconfirms a sewage facilities grant award of \$118,234.43 per annum to the City of Vernon beginning in the 2008-09 fiscal year, continuing until the debt is retired.*

Clarification Needed for Terms of Reference

There were questions from City of Vernon as to whether the first grant payment should be for the fiscal year of 2007-2008, since the award was given in December, 2007. Our operational policy has been that grant payments begin the first year in which (a) payments have been made on an MFA note (or equivalent for self-funded projects), and (b) the funds have been budgeted and requisitioned by the OBWB. I recommend that this policy be clarified in the grant program's Terms of Reference.

Recommended motion: *That the terms of reference for the OBWB's Sewerage Facilities Grant Program are amended to clarify that grant award payments to local government begin only after the project has broken ground and (a) payments have been made on an MFA note or equivalent, and (b) the funds have been budgeted and requisitioned.*



THE CORPORATION OF THE CITY OF VERNON

April 1, 2010

Anna Warwick Sears, PhD
Executive Director
Okanagan Basin Water Board
1450 KLO Road
Kelowna, BC V1W 3Z4

File: 1855-20

Re: Grant Application – Vernon Water Reclamation Plant

Dear Dr. Warwick Sears:

Attached is our completed application for a Sewerage Assistance Grant for the Vernon Water Reclamation Plant. The revised calculated amount of \$118,237.96 is less than the original estimated amount of \$175,000 due to the calculation of pre-1978 development being serviced by the new plant. We based our calculation of the pre-1978 development on population. Certain assumptions were made due to the major annexation of the Okanagan Landing area into the City in 1993. The following is the rationale used:

Population of the "old city" (not including OK Landing) – 1976 census	17,546
Population of the "old city" – 1991 census (just prior to annexation)	23,514
Growth rate – 1976 to 1991	34.01%
Population of OK Landing area – 1991 census	4,445
Estimated population of OK Landing in 1976 (assuming the same growth rate as Vernon)	3,317
Estimated combined population in 1976 (old city & OK Landing)	20,863
Population in 2004 (Plant Completion)	35,450
Approximate proportion of pre-1978 development	58.85%

It is therefore assumed that 58.85% of the annual debt servicing costs for the Plant is related to pre-1978 development.

We look forward to the Board's review of our application in due course.

Yours truly,

Kevin Bertles, CGA
Manager, Finance

Sewerage Assistance Grant Application

Please refer to the Guide to the Application as you complete this form.

Name of Organization	City of Vernon		
Name of Project Contact	Terry Martens	Phone:	550-3552
Email	tmartens@vernon.ca	Fax:	550-3553
Project Budget	\$29.4 million		

Name of project	Vernon Water Reclamation Plant
Brief Project Description	New sanitary sewer treatment facility yielding irrigation-quality reclaimed water

Is this project eligible for Provincial funding?

Yes	No
x	

Sewage Treatment Plant Upgrade or Construction

1 Will this project involve sewage treatment plant upgrade or construction?

Yes	No
x	

1a) What proportion of the project is for sewage treatment plant upgrades or construction?

100%

1b) If this project includes sewage treatment plant upgrades or construction, what proportion of wastewater treatment plant capacity services pre-1978 development?

●Please indicate this amount in the box to the right. It represents the % of plant upgrades eligible for funding

0.5885	<=% plant upgrades eligible>
--------	------------------------------

Sewering of Neighborhoods

2 Does this project upgrade neighborhoods on septic to community sewer?

Yes	No
	x

2a) What proportion of the project is for community sewer upgrades or construction?

0

2b) If this project includes sewerage, what proportion of the expanded capacity services pre-1978 development?

● Please indicate this amount in the box to the right. It represents the % of sewerage eligible for funding

0

<=% sewerage eligible>

3 Please determine the 1988 Converted Assessment Amount for all development occurring before 1978. Indicate this amount to the right.

60429673



<=Eligible assessment amount>

4 Financing

MFA Issue	Payment Date	MFA Debt-repayment Amount
77	Jun 1 / Dec 1	\$ 407,762.29
80	Apr 3 / Oct 3	\$ 140,008.75
95	Apr 13 / Oct 13	\$ 825,095.83
Total		<u>1,372,866.87</u>

5 Calculations

Deduction for plant capacity oversizing	→	564,934.72	<=Total*%plant upgrades not eligible>
Deduction for sewerage post-1977 areas	→	-	<=Total*%sewerage not eligible>
Total Debt-servicing costs for eligible areas	→	807,932.15	<=Total - \$ not eligible>
First 2.5 mills converted eligible assessment	→	151074.1825	<= 0.0025*Eligible assessment amount>
Total eligible debt	→	656,857.97	<=Pre-1977 debt - First 2.5 mills>
Total OBWB grant	→	118,234.43	<=18% Total Eligible Debt>

I hereby certify that the annual debt charges and grant calculations are in accordance with the provisions of the Sewerage Assistance Program.	
	<i>April 1, 2010</i>
Treasurer or CFO	Date
	<i>April 1, 2010</i>
Chief Administrative Officer	Date

*If a project is self-financed or on a shorted payment schedule, the OBWB grant will make payments equivalent to an MFA issue 20-year note

*The OBWB will only make payments to the municipality if MFA requires payments on their note. If the note payment is suspended, then the OBWB grant will also be suspended.

OKANAGAN BASIN WATER BOARD SEWAGE FACILITIES GRANTS

TERMS OF REFERENCE 2007

PREAMBLE

- The Okanagan Basin Study completed in 1974 identified increasing nutrient pollution as the cause of algal blooms and other signs of deteriorating water quality in Okanagan and Skaha Lakes. The major contributors to nutrient input into the lakes were the municipal sewer outfalls.
- The three valley regional districts opted to levy a tax through the Okanagan Basin Water Board (OBWB) on all properties within the Okanagan watershed. The purpose of the tax was to establish a Sewage Facilities Grant program to provide subsidies for construction of tertiary sewage treatment plants and collection systems by valley communities.
- There were two reasons for instituting this property tax: (1) local government considered the lakes a regional resource so that all citizens should pay toward restoring and maintaining the quality of the water regardless of whether they received sewers or not; and (2) the grants would assist smaller communities with a limited tax base in funding advanced treatment systems.
- The expenditures made on nutrient removal technology resulted in a decrease in phosphorus input into the lakes from municipal effluent of about 92.5%, from 59,000 kgs in 1970 to less than 5000 kgs in 1997.
- A significant proportion of the funds allocated through this program have gone toward community sewerage projects intended to decrease water pollution coming from developments with small lots and failing or over-capacity septic systems. To avoid repeating these costly fixes in the future, the OBWB now requires applicants to have in place zoning policies or bylaws prohibiting new development of lots less than 1.0 hectare that are not serviced by community sewers. This requirement is not intended to deter responsible development.

OPERATING PRINCIPLES FROM SLPS

The following principles were established in the OBWB Supplementary Letters Patent held by each regional district.

- The Water Board can levy up to 21¢ per \$1000 assessed value (for Sewage Facilities Grants) on all properties within the Okanagan drainage area.
- The OBWB will pay 18% of the total project cost of sewage improvement projects. The community must first pay the equivalent of 2.5 mills.
- Both treatment plants and collectors are eligible.

- Communities must submit applications for Sewage Facilities Grants prior to the commencement of project works. Grants will not be paid retroactively.

OBWB POLICIES

The following policies were made through OBWB resolutions to further define the operating principles of the grant program.

Qualifying

- Only communities employing tertiary treatment of sewage effluent are eligible for grants. (1977)
- Projects which qualify for Provincial government funding do not automatically qualify for OBWB funding. Qualifying for provincial funds is a necessary but not sufficient qualification for an OBWB Sewage Facilities Grant. (*policy revised: 2007*)
- The grant program is intended to address point source pollution from treatment plants utilizing old technology and to fund qualifying projects extending sewer service to subdivisions created prior to 1977 that are still on septic. New sewage treatment plants, expansions, or refits made necessary by growth or replacements due to age or outmoded technology are not eligible for OBWB grants. These works should be funded by DCCs and other mechanisms put in place by local government so that new infrastructure is paid for by the component causing the infrastructure needs. (1994)
- Lots on septic at the time of the original grant program (1977) will be eligible for funding when sanitary sewers are installed – providing infilling does not exceed the average annual growth rate for the community.
- At its discretion, the OBWB may decline approval of sewage infrastructure applications in communities that create lots smaller than 1.0 hectare which are not serviced by community sewers, and that do not have zoning policies or bylaws in place by January 1, 2008 prohibiting future creation of such lots. (*Policy adopted January, 2000 to follow Provincial policy for infrastructure funding and revised in 2007*)
- Each local government with subdivision approval authority is responsible for adopting the ‘1.0-hectare’ policy. For example regional district grant status is not affected if a member municipality does not comply. Electoral area bylaws which contravene the 1.0 hectare lot size policy of the OBWB are considered to be in non-compliance with the requirement for the Regional District.
- Homesite severance lots are exempted from the ‘1.0-hectare’ policy (2004).
- The ‘1-hectare’ requirement is limited in geographic scope to the portions of the regional districts within the Okanagan watershed. Areas outside the watershed are not taxed for OBWB programs and are not eligible for grants. Districts should be aware that subdivision of 1.0-hectare lots on septic outside the watershed may still jeopardize funding from provincial sources (2007).
- The 1.0 hectare requirement may be waived through preparation of an approved (by Ministry of Environment) Liquid Waste Management Plan (LWMP) for decentralized wastewater. The LWMP must address on-site sewage in a sustainable fashion with the understanding that the system will be considered as permanent infrastructure and will be

ineligible for sewerage assistance funds in the future. The LWMP must be supported by appropriate bylaws (e.g., OCPs, zoning, subdivision standards). In addition, local government bylaws must be in place for the enforcement of operation and maintenance of these systems. All Type II and III package treatment systems serving multiple homes must be registered under the Municipal Sewage Regulations, which among other requirements specifies that developers must post a bond equivalent to the value of the plants.

Financing

- Annual assessments are made on the projected draw on the fund in that fiscal year – it is not always necessary to levy the full 21¢ per \$1000.
- Water Board grants are made on a debt repayment basis. There is not enough money to fund project costs up-front.
- Communities that do not incur debt are still eligible for 18% funding with that portion being on a debt repayment basis. This policy is not retroactive prior to April 1985.
- Grants are tied to a Municipal Finance Authority (MFA) issue and repaid over a twenty year period.
- If the amounts to be paid recipients are greater than the funds available for distribution, the 18% will be reduced proportionately such that all recipients are reduced by the same percentage. An exception is made for communities which have not previously qualified for assistance from the Board. In such cases the reduction will not apply for the first three years and any shortfall will be born proportionately by the other qualifying communities.
- The OBWB will not approve any Sewage Facilities Grants or retroactive payments if the application is made more one year after confirmation of eligibility for provincial funding. (2001)

Future of the Program

- There will be an end point to the Sewer Grant Program when project debt is retired from all tertiary treatment plant construction and extension of sewers to developed areas that were present at the time of the grant program commencement (1977).
- *Recommendation for review: that OBWB investigate further infrastructure improvements, plans and research needed to protect the quality of valley lakes.* This program was specifically designed to avoid funding upgrades and expansion required by new development, stipulating that these should be paid by DCCs or other local government funding mechanisms. However, blanket policies prohibiting support of sewage plant upgrades due to age or outmoded technology reduce the ability of communities to maintain the highest possible levels of effluent treatment. In addition, new treatment technology may enable communities to expand wastewater re-use, reducing burdens on the supply system. Substantial pollution also arises from non-point sources – including stormwater run-off from roads, urban and agricultural areas. The OBWB should investigate the need and appropriateness of extending the Sewage Facilities Grants program to address other infrastructure upgrades that protect the quality of valley lakes (2007).

APPLICATION POLICIES

Requirements

- Communities should inform the OBWB of their intention to claim a grant for a new project at an early stage of their planning process so that adequate funds can be requisitioned.
- A general description of the project and a schedule of costs should be included in the application. Engineering detail is not necessary.
- Proof of eligibility for Provincial Infrastructure assistance should be attached. The project need not receive infrastructure funding as long as it meets appropriate standards and the lack of Provincial approval is due only to insufficient grant funds.
- The community must first pay the equivalent of 2.5 mills. Assessment is capped at 105% of the 1988 converted value for purposes of calculating the 2.5 mills to be paid by the community. {Revenue Sharing Act, Sections 6(4) and 35.1(1)(b)} The Provincial Infrastructure Grant Program of 1977 required communities to pay the 2.5 mills however later iterations of the Provincial program paid on the total project cost. The Okanagan Basin Water Board retained the original financial formula so that the basis for grant amounts would remain consistent.
- Applicants will provide a copy of a bylaw or a letter stating that a policy has been put in place prohibiting creation of lots less than 1.0 hectare in size not serviced by community sewers. Lots less than 1.0 hectares created by homesite severance on lands within the ALR are permissible.

Payments

- Communities meeting the criteria of the OBWB Sewage Facilities Grants receive 18% of the cost of treatment and collection systems upon completion of the project. Payments are made on a debt repayment schedule over a twenty year amortization through an MFA issue.
- Should a community refinance the debt from a project, the Okanagan Basin Water Board debt payments will be altered according to the new MFA rates. Changes in finance rates should be incorporated into the community's grant invoice.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
June 1, 2010
Agenda No: 7.2

File No. 0550.04

To: OBWB Directors
From: Anna Warwick Sears, Executive Director
Date: May 24, 2010
Subject: Sewerage Facilities Grant in RDOS – Okanagan Falls and Penticton

Okanagan Falls

The RDOS has applied for a sewerage facilities grant for construction of the Okanagan Falls Wastewater Treatment Plant. The total estimated cost of the project is \$10,100,000. Approximately 68.25% of the plant capacity is for neighborhoods constructed before 1978, and thus eligible under our program. The OBWB's grant program covers approximately 18 per cent of eligible costs for debt repayment of an MFA-issued 20-year note, so annual payments are projected to be approximately \$97,000.

The project is still in the pre-design phase, and construction will not begin for another year or two. As our grant program is tied to loan repayments, we will likely need to budget for this grant in 2012-2013. Okanagan Falls has had a history of problems with their treatment and collection systems, and these upgrades are timely.

Recommendation: That the OBWB approve in principle a grant to RDOS for eligible costs related to construction of a tertiary sewage treatment plant in Okanagan Falls.

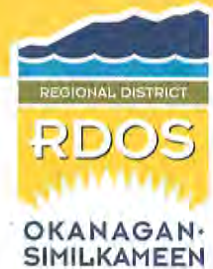
City of Penticton

The City of Penticton was awarded a sewerage assistance grant in December 2007, for eligible costs related to upgrades of their treatment plant and collection systems (see memo regarding the City of Vernon sewerage grant). The City of Penticton's first payment was made in Fall 2009 but the full amount was not included in our budget for 2009-2010 or 2010-2011. I am still working out the final details of payments amounts and due dates with Doug Leahy, the City of Penticton treasurer, and will report them at the June 1 OBWB meeting. However, the MFA has adjusted loan rates (downward) for a number of our existing grants, reducing the draw on our program and it is likely we will be able to cover the outstanding amounts without substantial impact to our sewerage grant reserve fund.

Recommendation: That the OBWB approves expenditure of reserve funds for the 2007 grant to the City of Penticton to upgrade their sewerage treatment and collection system.

I am working with Carol Teschner to update the grant retirement schedule and review the term length and updated values for all existing grants.

101 Martin Street, Penticton, British Columbia V2A 5J9
Tel: 250.492.0237 Fax: 250.492.0063
Toll Free: 877.610.3737
Email: info@rdos.bc.ca



March 10, 2010

Our File No.: **D-1855.05**
Okanagan Falls WWTP
OBWB Grant Application

Okanagan Basin Water Board
1450 KLO Road
Kelowna, BC, V1W 3Z4

Attention: Anna Warwick Sears, Ph.D.
Executive Director

Agenda No: 7.2

Regular: In-Camera:

Date: June 1, 2010



Dear Ms. Warwick Sears,

OBWB

Re: OBWB Sewerage Assistance Grant Application for the Okanagan Falls Wastewater Treatment Plant

This is the further to our previous letters of October 9th and November 3rd 2009 regarding the Regional District's application for an Okanagan Basin Water Board Sewage Facilities Grant for the Okanagan Falls Wastewater Treatment Plant project in the amount of \$96,839.54 / year.

The current total estimated project cost is \$10,100,000 which can be summarized as follows:

Wastewater treatment plant	\$7,250,000
Land & ROW acquisitions	\$265,000
Environmental assessment	\$55,000
Contingency allowance	\$1,330,000
Engineering	\$1,100,000
Administration	\$100,000
Total	<u>\$10,100,000</u>

Regarding the converted assessment amount as of 1988 for development within the Okanagan Falls Sewerage Service Area that was constructed prior to 1978, our Acting Manager of Finance has reviewed the 1988 assessments records from the BC Assessment Authority office in Penticton and determined that value to be \$2,545,476.

Regarding the portion of wastewater treatment capacity that services pre-1978 development, we have undertaken an intensive review of 1977 and 1978 aerial photography; which we found in our archives, and compared it to our most recent 2008 aerial ortho-photography for the Okanagan Falls Sewerage Service Area. From these photographic records; copies attached, we have ascertained that there were 521 facilities that were presumably being serviced by septic tank-type systems and that could have been provided with community sanitary sewer service in 1977 compared to 837 facilities today. Thus we calculate that the portion of the project that would upgrade the neighbourhood on septic-type systems to a tertiary community sanitary sewer system to be 62.25%.

Our review has not included an analysis of pre-1978 vs. today's development in Kaleden and Skaha Estates. Although the treatment plant will eventually service these properties, none will be contributing any funding towards the works currently contemplated. Only those properties

Attn.: Dr. Anna Warwick Sears

Ref.: **OBWB Sewerage Assistance Grant Application for
the Okanagan Falls Wastewater Treatment Plant**

within the Okanagan Falls Sewerage Service Area will be subject to taxation and/ or user fees for treatment plant service.

We have been unable to ascertain such data with any reliable accuracy by other methods; i.e. building permits, census records, old reports, etc. The Okanagan Falls community is an unincorporated area and has no official boundary and is a part of Electoral Area 'D' within the Regional District. Building permits were not issued nor required and census data and statistical data contained in old reports was not confined to the specific area in question.

Sewers were extended through portions of the community and an oxidation ditch type sewage treatment plant was constructed in 1978 and became operational in early 1979. The contract documents for that project called for the installation of approximately 300 service connections. This information is considered unreliable insofar as determining service to pre-1978 development as not all homes in the community were provided service at that time; this project being the first step in providing sewers throughout the community. As well some connections were provided to vacant lots.

We have calculated the 'MFA Debt-repayment Amount'; in point 4 - Financing as \$874,475.68; i.e. total project cost estimate of \$10,100,000; i.e. the total implied debt, over 20 years at 5.3% utilizing the MFA amortization schedules.

Should you require any further information or have any other concerns or questions, please contact me.

Yours truly,



Alfred Hartviksen, *P.Eng., Engineer*

cc: Bill Newell, *CAO*
Jim Tarves, *Acting Manager of Finance*
Andrew Reeder, *P.Eng., Engineering Services Manager*
Bill Schwarz, *Director - Electoral Area 'A'*

Enclosures:

- 1.) Okanagan Basin Water Board's completed and executed 'Sewerage Assistance Grant Application' in the amount of \$96,839.54 and dated March 10, 2010.
- 2.) 1977/ 78 Aerial Photography: with point-marks indicating facility counts.
- 3.) Present; i.e. 2008, Aerial Ortho-Photography: with point-marks indicating facility counts.

Sewerage Assistance Grant Application

Please refer to the Guide to the Application as you complete this form.

Name of Organization	Regional District of Okanagan Similkameen		
Name of Project Contact	Bill Newell	Phone:	250-490-4104
Email	bnewell@rdos.bc.ca	Fax:	250-492-0063
Project Budget	\$10,100,000.00		

Name of project	Okanagan Falls Wastewater Treatment Plant
Brief Project Description	Design and construction of a biological nutrient removal (BNR) wastewater treatment facility.

Is this project eligible for Provincial funding?

Yes	No
Yes	

Sewage Treatment Plant Upgrade or Construction

1 Will this project involve sewage treatment plant upgrade or construction?

Yes	No
Yes	

1a) What proportion of the project is for sewage treatment plant upgrades or construction?

100%

1b) If this project includes sewage treatment plant upgrades or construction, what proportion of wastewater treatment plant capacity services pre-1978 development?

- Please indicate this amount in the box to the right. It represents the % of plant upgrades eligible for funding

0.6225	<=% plant upgrades eligible>
--------	------------------------------

Sewering of Neighborhoods

2 Does this project upgrade neighborhoods on septic to community sewer?

Yes	No
	No

2a) What proportion of the project is for community sewer upgrades or construction?

0

2b) If this project includes sewerage, what proportion of the expanded capacity services pre-1978 development?

- Please indicate this amount in the box to the right. It represents the % of sewerage eligible for funding

0	<=% sewerage eligible>
---	------------------------

3 Please determine the 1988 Converted Assessment Amount for all development occurring before 1978. Indicate this amount to the right.

2545476	<=Eligible assessment amount>
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4 Financing

MFA Issue	Payment Date	MFA Debt-repayment Amount
10,100,000		\$ 874,475.68
Total		<u>874,475.68</u>

MFA note has not yet been attained

5 Calculations

Deduction for plant capacity oversizing	→	330,114.57	<=Total*%plant upgrades not eligible>
Deduction for sewerage post-1977 areas	→	-	<=Total*%sewerage not eligible>
Total Debt-servicing costs for eligible areas	→	544,361.11	<=Total - \$ not eligible>
First 2.5 mills converted eligible assessment	→	6363.69	<= 0.0025*Eligible assessment amount>
Total eligible debt	→	537,997.42	<=Pre-1977 debt - First 2.5 mills>
Total OBWB grant	→	96,839.54	<=18% Total Eligible Debt>

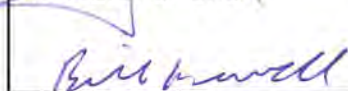
I hereby certify that the annual debt charges and grant calculations are in accordance with the provisions of the Sewerage Assistance Program.


Jim Tarves

10 March 2010

Treasurer or CFO

Date


Bill Newell

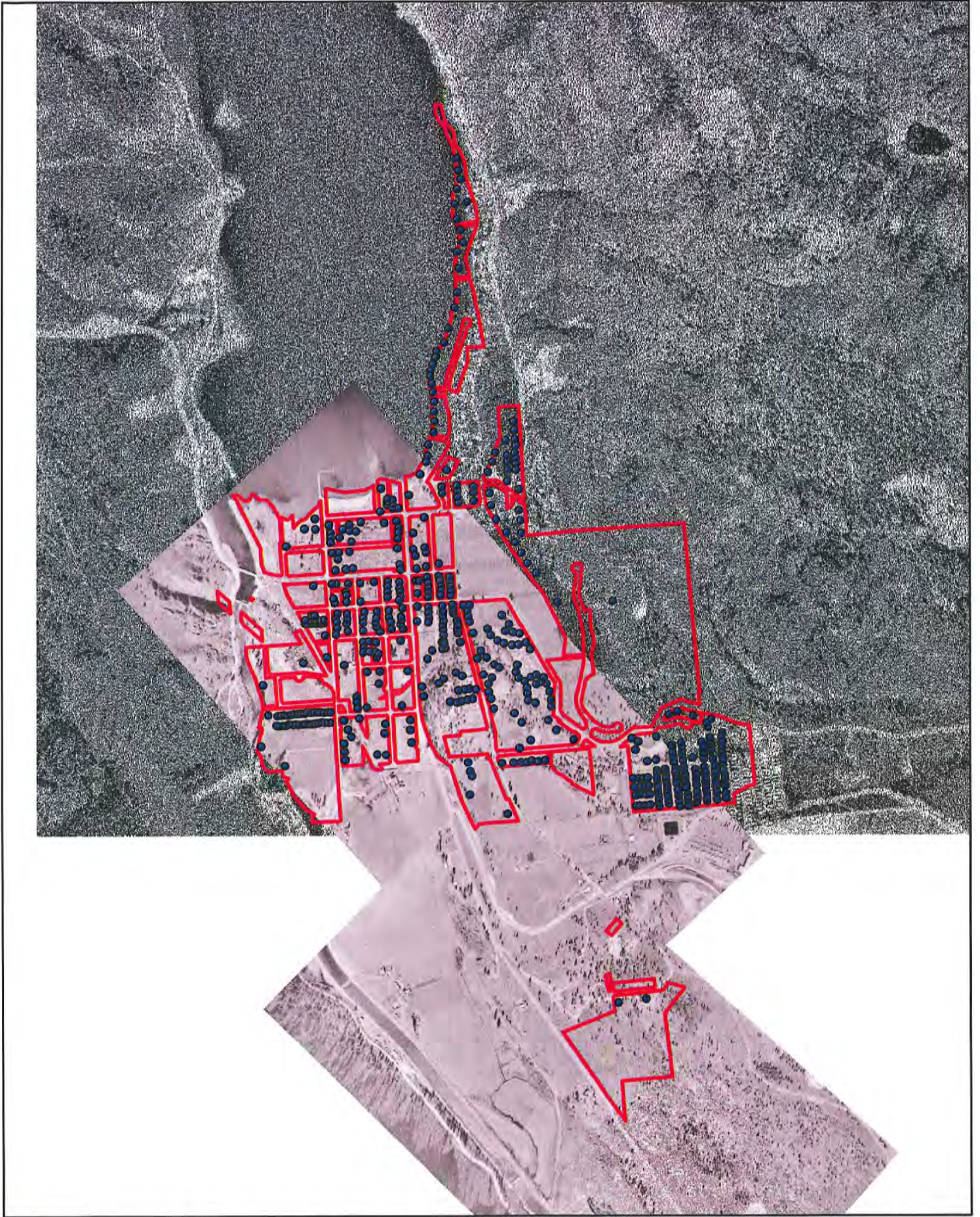
10 March 2010

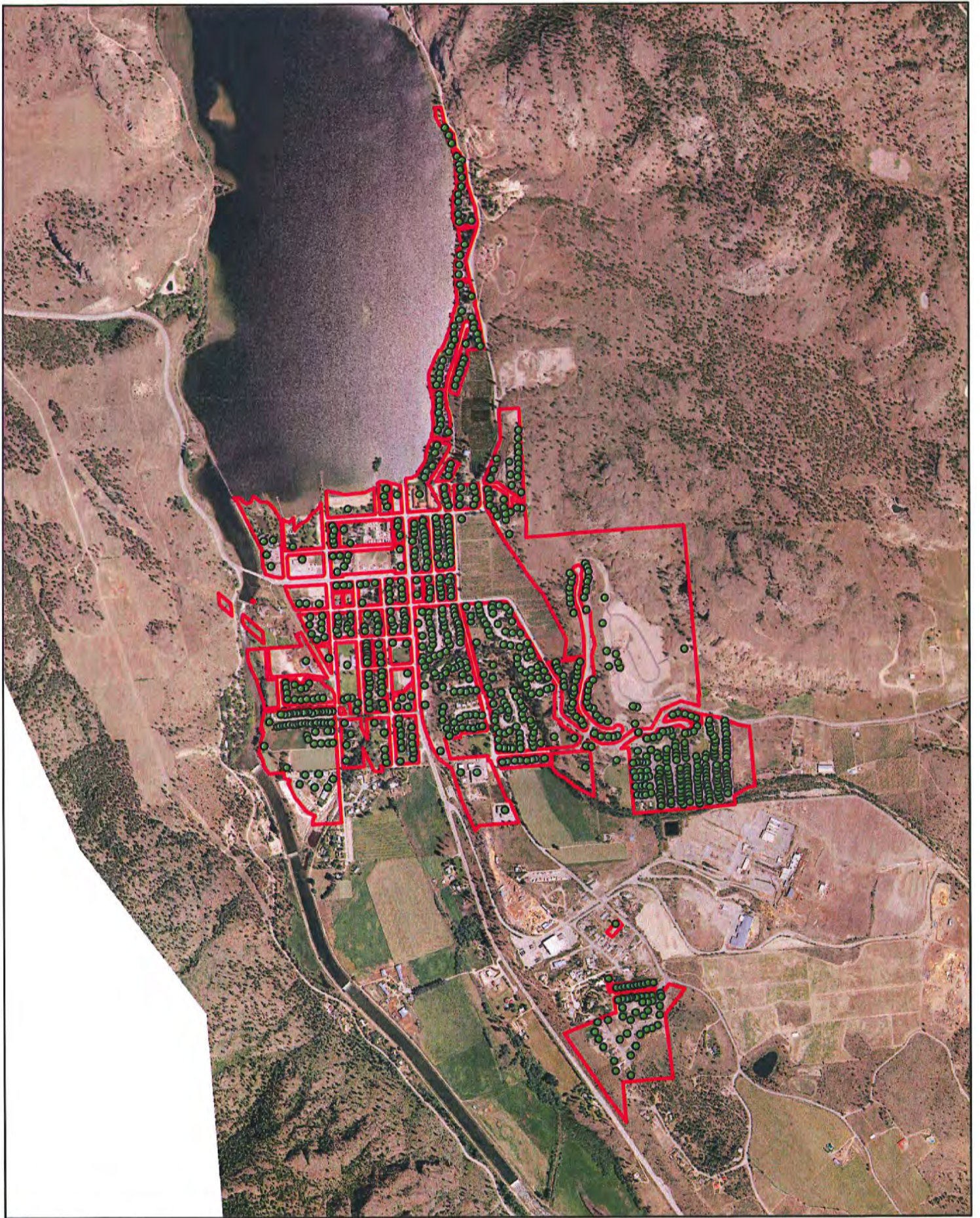
Chief Administrative Officer

Date

*If a project is self-financed or on a shorted payment schedule, the OBWB grant will make payments equivalent to an MFA issue 20-year note

*The OBWB will only make payments to the municipality if MFA requires payments on their note. If the note payment is suspended, then the OBWB grant will also be suspended.





Sewerage Assistance Grant Application

Please refer to the Guide to the Application as you complete this form.

Name of Organization	City of Penticton		
Name of Project Contact	Doug Leahy	Phone:	250-490-2413
Email	doug.leahy@penticton.ca	Fax:	250-490-2402
Project Budget	\$32,283,098.00		

Name of project	Liquid Waster Receiving Facility, Industrial Area, Sewer Treatment Plant
Brief Project Description	Upgrades of treatment plant, industrial area sewer, liquid waste facility

Is this project eligible for Provincial funding?

Yes	No
X	

Sewage Treatment Plant Upgrade or Construction

1 Will this project involve sewage treatment plant upgrade or construction?

Yes	No
X	

1a) What proportion of the project is for sewage treatment plant upgrades or construction?

100%

1b) If this project includes sewage treatment plant upgrades or construction, what proportion of wastewater treatment plant capacity services pre-1978 development?

- Please indicate this amount in the box to the right. It represents the % of plant upgrades eligible for funding

100%	<=% plant upgrades eligible>
------	------------------------------

Sewering of Neighborhoods

2 Does this project upgrade neighborhoods on septic to community sewer?

Yes	No
X	

2a) What proportion of the project is for community sewer upgrades or construction?

100%

2b) If this project includes sewerage, what proportion of the expanded capacity services pre-1978 development?

- Please indicate this amount in the box to the right. It represents the % of sewerage eligible for funding

100%	<=% sewerage eligible>
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3 Please determine the 1988 Converted Assessment Amount for all development occurring before 1978. Indicate this amount to the right.

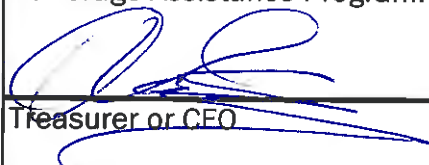

99380297	<=Eligible assessment amount>
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4 Financing

MFA Issue	MFA Expiry Date	Payment Date	MFA Debt-repayment Amount
	2027	Jun 1/Dec 1	\$85,871.00
	2028	May 20/Nov 20	\$680,654.00
	2029	Apr 13/ Oct 13	\$524,172.00
	2028	Jun 3/Dec 3	\$60,324.00
Total			<u>\$1,351,021.00</u>

5 Calculations

Deduction for plant capacity oversizing	→	-	<=Total*%plant upgrades not eligible>
Deduction for sewerage post-1977 areas	→	-	<=Total*%sewerage not eligible>
Total Debt-servicing costs for eligible areas	→	1,351,021.00	<=Total - \$ not eligible>
First 2.5 mills converted eligible assessment	→	248450.7425	<= 0.0025*Eligible assessment amount>
Total eligible debt	→	1,102,570.26	<=Pre-1977 debt - First 2.5 mills>
Total OBWB grant	→	198,462.65	<=18% Total Eligible Debt>

I hereby certify that the annual debt charges and grant calculations are in accordance with the provisions of the Sewerage Assistance Program.	
	
Treasurer or CFO	Date
Chief Administrative Officer	Date

*If a project is self-financed or on a shorted payment schedule, the OBWB grant will make payments equivalent to an MFA issue 20-year note

*The OBWB will only make payments to the municipality if MFA requires payments on their note. If the note payment is suspended, then the OBWB grant will also be suspended.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
June 1, 2010
Agenda No: 7.3

File No. 0550.04

To: OBWB Directors
From: Anna Warwick Sears, Executive Director
Date: May 24, 2010
Subject: **RDCO Lease agreement**

The lease agreement for our tenancy at the Regional District of Central Okanagan is being renewed. The new lease is for a two year period, from Jan. 1, 2010, to Dec. 31, 2011, and opens for renewal at that time. A copy of the agreement is attached to this memo. We have held offices at RDCO since December 2008 and have been very pleased with the high-level of accommodations and professionalism.

The primary difference between the current lease and the original one is that this also includes a formal contract for financial services and a rate increase. RDCO has tracked the hours spent by our accountant on our accounting, payroll, benefits, and book-keeping since May 2008 when they took over the task from RDNO – and these have averaged 2 days/week. It is RDCO policy that the rates for this service are structured for full cost-recovery, and competitive with the external market. The new rate is \$90/hour, or \$65,520/year at the current level of service.

	IT	Building Costs	Financial Services
2009 Charges	\$16,000	\$16,701	\$25,000 (May-Dec) equivalent to \$42,850/annual
2010 Charges	\$16,184	\$15,986	\$65,520

Carol Teschner, our accountant, has been steadily working with me to review and update our accounting systems, with a goal to simplify cash-flow tracking for individual projects, budgeting, and the grant programs, as well as tangible capital assets. As these projects are completed, it is likely that the number of hours will decrease in the coming year, and our contract will be adjusted to reflect this change.

Although the rates under the new lease represent a substantial increase in our accounting costs, I believe that we are receiving a high level of value from an experienced accountant, and it is very desirable to have our systems well-integrated with RDCO's.

Recommendation: That the OBWB approve the lease agreement as presented by RDCO.



THIS Lease made as of the ___ day of _____, 2010

OBWB

BETWEEN: Regional District of Central Okanagan
1450 KLO Road
Kelowna, B.C. V1W 3Z4

(the "Landlord");

AND: Okanagan Basin Water Board

(the "Tenant");

WHEREAS the Landlord has the right to occupy the premises at 1450 KLO Road, Kelowna, British Columbia;

AND WHEREAS the parties wish to enter into this Agreement for the purposes of the Tenant entering into occupation of a portion such premises;

NOW THEREFORE, in consideration of the rents covenants and agreements hereinafter reserved and contained, the Landlord and the Tenant hereby agree as follows:

1. In this Agreement the following words and phrases shall have the meanings set out below:
 - (a) "Building" shall mean the buildings and improvements located on the Lands;
 - (b) "Common Areas" shall mean public parking areas, common loading and service areas and other facilities of the Lands and Buildings from time to time for the common use of the Tenant and other tenants of the Building, their employees, agents and invitees;
 - (c) "Lands" shall mean the property located at 1450 KLO Road, Kelowna, British Columbia, V1W 3Z4, more particularly known and described as Lot 1, District Lot 131, O.D.Y.D., Plan KAP53338;
 - (d) "Operating Costs" shall mean the aggregate of the following:
 - i. all real property taxes, including local improvement rates and school taxes levied or assessed by any competent authority upon or in respect to the Premises, the Building, and the Lands;
 - ii. the cost of building insurance provided by the Landlord;

- iii. all rates and charges for utilities provided by the Landlord for which the Tenant is not separately metered and charged by the provider of such service;
 - iv. all operating costs and expenses of the Lands and the Building, which operating costs and expenses shall be deemed to include any and all expenses properly chargeable against income incurred by the Landlord in connection with the operation, maintenance or repair of the Lands and the Building, and by way of example without limiting the generality of the foregoing shall include the costs of the following:
 - (1) heating, ventilation, air-conditioning, electricity, water and sewer used throughout the Lands and the Building;
 - (2) the care of, security in, maintenance of, cleaning of or operation of the Lands and the Building;
 - (3) gardening and landscaping, maintenance of parking areas and driveways, and the removal of snow and garbage; and
 - (4) all repair costs of any mechanical systems for the Building;
 - (5) use of the Landlord's office amenities, staff room amenities, office equipment and supplies and internal systems including telephone and cell phone systems.
- (e) "Premises" shall mean a portion of the Building consisting of approximately 640 square feet, as outlined in cross-hatch highlighting on the sketch plan attached to this Agreement as Schedule "A"; and
- (f) "Tenant's Proportionate Share" shall mean that portion that equals the fraction that the proportion of the square footage of the Premises bears to the total square footage of the Building.
2. The Landlord hereby leases the Premises to the Tenant. The Landlord grants to the Tenant, its employees, agents and invitees, the right in common with the Landlord and all others having a like right, the free use of all the Common Areas.
3. The Tenant shall have and hold the Premises for and during the term of one (2) year commencing on the 1st day of January, 2010 and ending on the 31st day of December, 2011. If during the term of this Agreement, the Tenant has not defaulted in the performance or observance of any of its obligations under the terms of this Agreement, the Tenant is hereby given the option to renew this Lease for a further period of two (2) years on all the same terms and conditions as written herein upon giving written notice to the Landlord not less than three months prior to the end of the term herein created.

4. During the term of this Agreement, the Tenant agrees to pay the Landlord, as rent for the Premises, the sum of Eleven Thousand, Five hundred and Twenty Dollars (\$11,520.00) per annum, payable in equal consecutive monthly instalments of Nine Hundred and Sixty Dollars (\$960.00), on the first day of each and every month in advance. If the term commences on a date other than the first day of a month, or ends on a date other than the last day of a month, then the foregoing rental amount shall be prorated from such commencement date or to such end date, as the case may be.
5. The Tenant shall also pay as additional rent any and all sums of money or additional charges required to be paid by the Tenant to the Landlord under this Agreement, whether or not the same be designated as additional rent. If the Tenant fails to pay any additional rent, as when due, the Landlord shall have the same remedies for the collection of additional rent as it has for the recovery of basic rent in arrears.
6. The Tenant shall pay to the Landlord the Tenant's Proportionate Share of the Operating Costs.
7. The Tenant shall pay the amount of the Tenant's Proportionate Share of the Operating Costs on the basis of the Landlord's estimate of those costs for each twelve (12) month period of this Agreement. As of March 1 in each calendar year, the Landlord shall create a statement showing the actual amount of the Tenant's Proportionate Share of the Operating Costs for the immediately preceding year, which statement shall be provided to the Tenant within thirty (30) days of that date. In the event that the actual amounts of the Tenant's Proportionate Share of the Operating Costs for the preceding year exceed the amount that have been collected from the Tenant in the preceding year, then the Tenant shall pay such sum to the Landlord within thirty (30) days of receipt of such statement by the Tenant. In the event that the actual amount of the Tenant's Proportionate Share of the Operating Costs for the preceding year are less than the amount that have been collected from the Tenant in the preceding year, then the Landlord shall pay such sum to the Tenant within thirty (30) days of the receipt of such statement by the Tenant. Included with such statement from the Landlord shall be an estimate of the Tenant's Proportionate Share of the Operating Costs for the upcoming year period and the Tenant agrees to pay such sum to the Landlord for the then current twelve (12) month lease period, on a 1/12 estimated basis on the first day of each calendar month.
8. The Landlord estimates the Tenant's Proportionate Share of the Operating Costs for the next twelve month period to be Two Thousand, Three Hundred and Eighty dollars and Eighty cents (\$2380.80) plus overhead costs of 15% of the combined amount of rent and operating costs which amounts to Two Thousand, and Eighty-Five dollars and Twelve cents (\$2085.12), subject to review at the end of year one of this lease. This means a total monthly cost to the Tenant for operating costs and office amenities is estimated at Three Hundred and Seventy Two Dollars and Sixteen Cents (\$372.16) per month.

Calculation of total monthly payment, including rent, is attached to this Agreement as Schedule "C".

9. The Tenant shall pay the amount of the Tenant's Proportionate Share of the Financial and Administrative Services and IT Services on the basis of the Landlord's estimate of those costs for each twelve (12) month period of this Agreement. As of March 1 in each calendar year, the Landlord shall create a statement showing the actual amount of the Tenant's Proportionate Share of the Financial and Administrative and IT Costs for the immediately preceding year, which statement shall be provided to the Tenant within thirty (30) days of that date. In the event that the actual amounts of the Tenant's Proportionate Share of the Financial and Administrative and IT Costs for the preceding year exceed the amount that have been collected from the Tenant in the preceding year, then the Tenant shall pay such sum to the Landlord within thirty (30) days of receipt of such statement by the Tenant. In the event that the actual amount of the Tenant's Proportionate Share of the Financial and Administrative and IT Costs for the preceding year are less than the amount that have been collected from the Tenant in the preceding year, then the Landlord shall pay such sum to the Tenant within thirty (30) days of the receipt of such statement by the Tenant. Included with such statement from the Landlord shall be an estimate of the Tenant's Proportionate Share of the Administrative and Financial and IT Costs for the upcoming year period and the Tenant agrees to pay such sum to the Landlord for the then current twelve (12) month lease period, on a 1/12 estimated basis on the first day of each calendar month.
10. The Landlord estimates the Tenant's Share of the Financial and Administrative Services for the next twelve months to be Sixty-Five Thousand, Five Hundred and Twenty Dollars (\$65,520.00) and IT Services for the next twelve month period to be Sixteen Thousand, One-Hundred and Eighty-Four Dollars (\$16,184.00) combined amount of Financial and Administrative Services and IT Services which amounts to Eighty One Thousand Seven Hundred and Four Dollars (\$81,704.00), subject to review at the end of the year. This means a total monthly cost to the Tenant for Financial and Administrative Services and IT Services is estimated at Six Thousand, Eight Hundred and Eight Dollars and Sixty-Seven Cents (\$6,808.67) per month.

Calculation of total monthly payment is attached to this Agreement as Schedule "B".

11. During the term of this Agreement and any extension of it, the Tenant shall pay goods and services tax from time to time levied in respect of:
 - (a) goods and services which the Landlord provides or causes to be provided, exclusively to or for the sole benefit of the Tenant, to the Landlord upon request and upon receipt of evidence from the Landlord that the Landlord has paid for such goods and services;
 - (b) goods and services which the Landlord provides or causes to be provided to or for the benefit of the Common Areas, to the Landlord as part of Common Area Costs to the extent only of the Tenant's Proportionate Share of such costs; and
 - (c) rent, to the extent only that the Tenant, and not the Landlord, is obliged at law to pay such tax on rent.

12. It is the Tenant's responsibility to ensure that the rent is paid on the first day of each and every month by delivering a cheque for the rent and Tenant's Proportionate Share of the Operating Costs due to the offices of the Landlord set out at the beginning of this Agreement.
13. If the area occupied under this Lease increases, the Tenant agrees to pay to the Landlord additional rent in proportion to the increase in area of the Premises and the Tenant's Proportionate Share of the Operating Costs shall also be increased accordingly.
14. The Tenant agrees to use the Premises as an office and the surrounding grounds for parking purposes by its employees only.
15. The Tenant agrees to abide by:
 - (a) all rules and regulations for the use of the Lands and Building, as may be created by the Landlord from time to time; and
 - (b) all laws that are applicable to the conduct of the Tenant's affairs and the use of the Premises.
16. The Landlord agrees to pay all the property taxes and keep the Premises free of any encumbrances which would adversely impact the Tenant's use thereof.
17. The Tenant covenants not to assign this Agreement or sublet any portion of the Premises.
18. This Agreement may be terminated by either party giving the other party One hundred and eighty days (180) days (approximately six months) written notice of such termination.
19. The Tenant covenants to yield up the Premises and all fixtures, furnishings, and equipment attached thereon, upon expiration or earlier termination of this Agreement, in good repair and in an ordinary state of cleanliness, reasonable wear and tear excepted.
20. The Tenant agrees to repair damages caused to the Premises, the Lands or the Building by the negligence or wilful act of the Tenant, its employees, agents or invitees. The Tenant shall not make any structural alterations or leasehold alterations without the prior written approval of the Landlord. Such approval will be requested in writing and shall not be unreasonably withheld.
21. The Landlord agrees to keep the Lands and Building in good repair and tenable condition and comply with the health and safety standards required under the law.
22. The Tenant agrees to well and sufficiently repair, maintain and keep the Premises with appurtenances and fixtures, in good and substantial repair. It is agreed that the Landlord shall be entitled to enter the Premises at any reasonable time by giving at least a 24 hours notice to the Tenant to view the state of repair and make such alterations as necessary.

23. The Tenant agrees to take good care of the Premises and keep the same in a tidy and healthy condition.
24. The Tenant agrees that it will use the Premises in a manner which does not constitute a nuisance to any other occupants of the Building or the Lands.
25. Insurance and Indemnity Provisions:
 - (a) The Tenant will indemnify and save harmless the Landlord and its elected officials, directors, officers, employees and agents (together, the "Indemnitees") from and against all claims, demands, losses, damages, costs, liabilities, expenses, fines, penalties, assessments and levies, including fees of solicitors and other professional advisors, made against or incurred, suffered or sustained by any of the Indemnitees at any time or times (whether before or after the expiration or termination of this Agreement) where the same or any of them are based upon or arise out of:
 - i. any breach, violation or non-performance by the Tenant of any covenant, condition or term in the Agreement, or
 - ii. any bodily injury, death or property damage or loss of use thereof occurring or happening in, on or off the property in any way relating to this Agreement or by virtue of the use or occupation of the property by the Tenant under this Agreement; or
 - iii. any act or omission taken or maintained or the exercise of any rights by the Tenant (or others for whom the Tenant is responsible at law) pursuant to any provision in this Agreement.
 - (b) The indemnity contained in this section will survive the expiration or termination of this Agreement.
 - (c) The Tenant, at the sole expense of the Tenant, will obtain and maintain in force during the term:
 - i. commercial general liability insurance including non-owned automobile and contractual liability insurance, including liability arising out of completed operations, blanket written contractual liability contingent employers liability, non-owned automobile liability and liability assumed by the Tenant in connection with and applicable to this Agreement, with inclusive limits of not less than five million (\$5,000,000) dollars for bodily injury, death and Property damage and including loss of use thereof, which may arise directly or indirectly out of the acts or omissions of the Tenant in any way relating to the use and occupation of the Property, including under this Agreement and arising from an accident or occurrence, which policy shall name the Landlord (Regional District of Central Okanagan) as additional insured;

- ii. all risks tenants legal liability insurance to a limit sufficient to repair or rebuild the portion of the premises occupied by the Tenant, but in no event to be less than \$150,000. The deductible in said tenants legal liability insurance is not to exceed \$2,500.00 and the deductible will be the responsibility of the Tenant in the event of a claim;
 - iii. if any licensed vehicles are owned, leased, rented or used in the performance of this Agreement, automobile liability coverage with inclusive limits of not less than five million (\$5,000,000) dollars providing third party liability and accident benefits insurance for all such vehicles.
- (d) The Tenant will deliver to the Landlord prior to execution of this Agreement by the parties, evidence of insurance issued to comply with the insurance requirements outlined in this Agreement, by way of:
- i. a duly executed Regional District of Central Okanagan Certificate of Insurance; and
 - ii. evidence of Automobile Liability Insurance in the form of a duly executed Insurance Corporation of British Columbia APV 47 form.
- (e) The Tenant will ensure that the insurance described in this Agreement may not be cancelled, reduced, altered or materially changed in any way whatsoever without the insurer or insurers giving not less than 30 days prior written notice to the Landlord by registered mail to the following address:
- Regional District of Central Okanagan
1450 K.L.O. Road
Kelowna, B.C. V1W 3Z4**
- (f) In the event of any third party loss or damage or any physical loss or damage to the building, equipment, apparatus, improvements or fixtures of the Tenant, the settlement or payment of the subsequent claim shall be made without the right of subrogation against the Landlord or any of its respective directors, officers, employees, servants or agents.
26. In the event the Tenant continues to occupy the Premises after the expiration or earlier termination of this Agreement or any extensions thereof without any further written agreement, the Tenant shall be deemed to be a tenant from month to month at the monthly rental hereinbefore set out and on the same terms and conditions contained in this Agreement except as to the length of tenancy.
27. This Agreement shall inure to the benefit of and be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.

28. If and whenever the rents reserved by this Agreement or any part of them are in arrears or unpaid for ten (10) days after any of the days in which the same ought to have been paid, although no formal or other demand shall have been made for such rent, or in case there be default or breach or non-performance of any of the other covenants or agreements in this Agreement contained on the part of the Tenant and such default continues for thirty (30) days after notice thereof to the Tenant, then and in any of such cases, it shall be lawful for the Landlord at any time thereafter without notice to re-enter the Premises and the same to have again, repossess and enjoy as of its former estate, anything herein contained to the contrary notwithstanding, provided always that in the event of a default by the Tenant which is capable of being cured, and which is cured within the period of the notice of such default from the Landlord, then such Lease shall not terminate.
29. If the Landlord re-enters the Premises by reason of the default of the Tenant prior to the expiry of the term of this lease, the Tenant will be liable to the Landlord for the amount of rent for the remainder of the term as if such re-entry had not been made, less the actual amount received by the Landlord after such re-entry from any subsequent tenant leasing the Premises during the remainder of the term after deducting his costs of reletting.
30. Upon the Landlord becoming entitled to re-enter upon the Premises, the Landlord shall have the right in addition to all other rights, to immediately determine this Agreement by giving notice in writing to the Tenant and thereupon rent shall be apportioned and paid to the date of such determination and the Tenant shall immediately deliver up possession of the Premises and the Landlord may re-enter and take possession of the same.
31. If the term of this Agreement or any extension of it shall at any time be seized or taken in execution or attachment by any creditor of the Tenant or if the Tenant shall make any assignment for the benefit of creditors or shall become bankrupt or insolvent or shall take the benefit of any bankruptcy or insolvency legislation or in case the Premises shall become vacant or unoccupied for a period of ten (10) days, the then current months' rent together with the rent accruing for the balance of the term or the next three months, whichever is less, shall immediately become due and payable and the term of this Agreement or any extension of it shall at the option of the Landlord become forfeited and void.
Neither this Agreement nor any interest in it nor any estate created by this Agreement shall pass to or enure to the benefit of any trustee in bankruptcy or any receiver of any assignee for the benefit of creditors or otherwise by operation of law.
32. Whensoever the Landlord shall be entitled to levy distress against the goods and chattels of the Tenant it may use such force as it may deem necessary for that purpose and for gaining admittance to the Premises without being liable in any action in respect of such action, or for any loss or damage occasioned by such action and the Tenant expressly releases the Landlord from all actions, proceedings, claims or demands whatsoever for or on account of or in respect of any such forcible entry or any loss or damage sustained by the Tenant in connection with such forcible entry.

33. The waiver by the Landlord of any breach by the Tenant of any covenant or condition contained in this Agreement shall not be construed as or constitute a waiver of any further or other breach of the same or any other covenant or condition, and the consent or approval of the Landlord to or of any act by the Tenant requiring the Landlord's consent or approval shall not be deemed to waive or render unnecessary the Landlord's consent or approval to any subsequent act, similar or otherwise, by the Tenant.
34. If the Tenant shall fail to perform any of the covenants or obligations of the Tenant under or in respect of this Agreement the Landlord may from time to time at its discretion perform or cause to be performed any such covenants or obligations or any part thereof and for such purpose may do such things as may be required and may enter upon the Premises to do such things and all expenses incurred and expenditures made by or on behalf of the Landlord shall be paid immediately by the Tenant to the Landlord and if the Tenant fails to pay the same the Landlord may add the same to the rent and recover the same by all remedies available to the Landlord for the recovery of rent in arrears; provided that if the Landlord commences or completes either the performance or causing to be performed of any of such covenants or obligations or any part thereof, the Landlord shall not be obliged to complete such performance or causing to be performed or be later obliged to act in a like fashion. The Tenant shall not be entitled to any claim or compensation for any inconvenience, nuisance, discomfort or loss of business occasioned directly or indirectly from any action of the Landlord under this Paragraph.
35. The Tenant shall pay to the Landlord interest at twenty-four (24%) percent per annum, compounded semi-annually, on all payments of rent, and other sums required to be paid under this Agreement from the date upon which the same were due until actual payment thereof.
36. The Landlord may distrain for the rent reserved by this Agreement including additional rent, by distress upon the goods and chattels of the Tenant wherever situated and upon any premises to which the same are removed. The Tenant agrees that it shall remain liable for any deficiency should a distress sale not yield sufficient monies to pay all rent due and owing.
37. Whenever in this Agreement it is required or permitted that notice or demand be given or served by either party to this Lease to or on the other, the same shall be in writing and shall be sufficiently communicated if sent by Priority Post,

To the **Tenant** at the following address:

Okanagan Basin Water Board
1450 KLO Road
Kelowna, B.C. V1W 3Z4

And

To the **Landlord** at the following address:

Regional District of Central Okanagan
1450 KLO Road
Kelowna, B.C. V1W 3Z4

and, if forwarded by Priority Post, shall be deemed to have been served on the third business day following the date it was mailed.

38. Time is of the essence in this Agreement.

IN WITNESS WHEREOF the parties hereto have executed this Lease as follows:

Signed by Regional District of Central Okanagan this _____ day of _____, 2010.

(For Landlord)

Witness Name Robert Hobson, Chair

Address Harold Reay, Director of Corporate Services

Signed by Okanagan Basin Water Board this _____ day of _____, 2010.

(For Tenant)

Witness Name Authorized Signatory

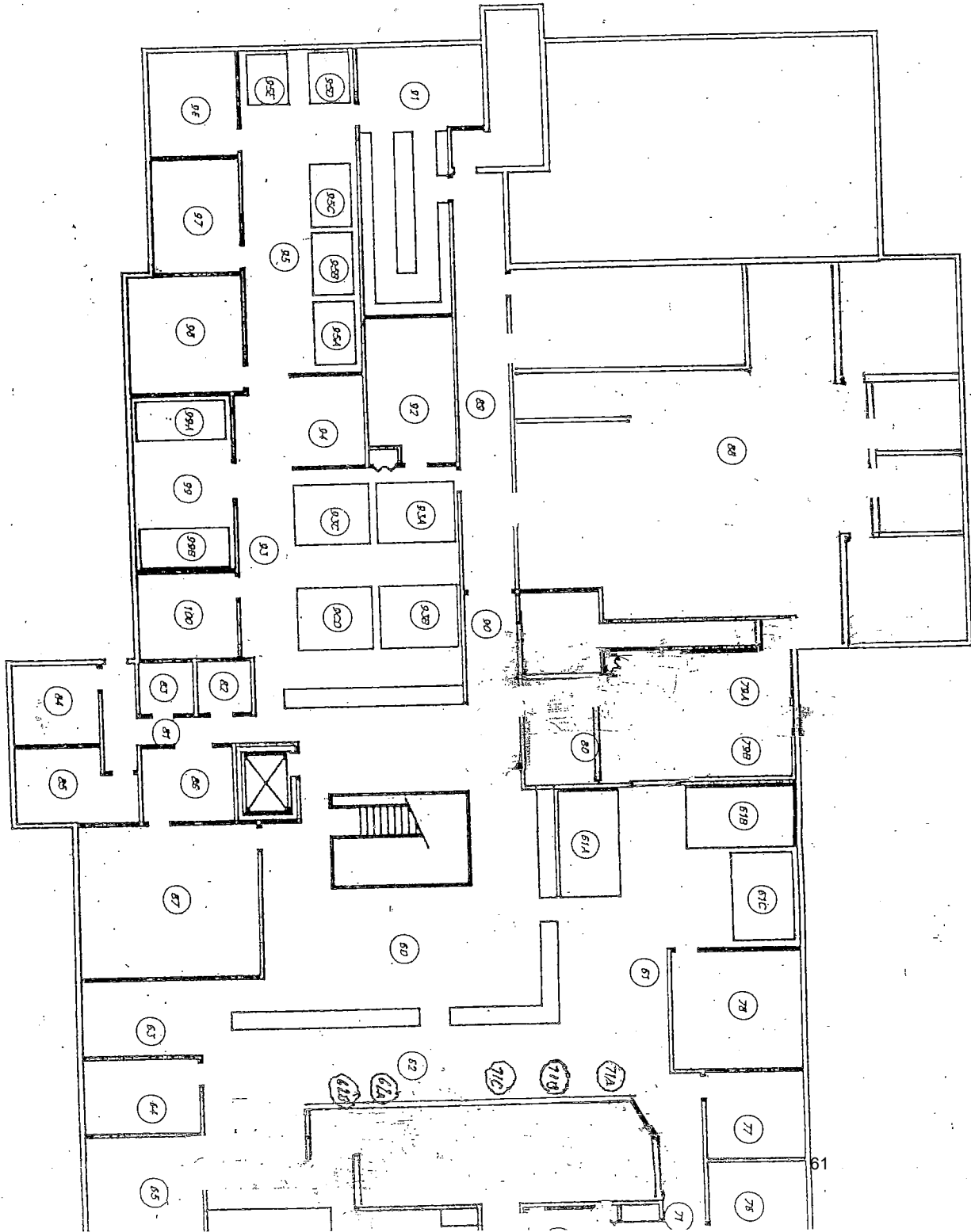
Print Name

Address Position Title for Okanagan
Basin Water Board

SCHEDULE 'A'

OCCUPANCY SCHEDULE

80	PLAN'S LAYOUT ROOM
81	CORRIDOR
82	ELEVATOR MACHINERY
83	LANDING
84	W.C.
85	W.C.
86	COFFEE ROOM
87	MEETING ROOM
88	FUTURE EXPANSION
89	CORRIDOR
90	CORRIDOR
91	LIBRARY
92	FILES
93	GENERAL BUILDING DEPT.
94	H.E.A.P.
95	BUILDING SECRETARY #1
96	SPARE DESK
97	SPARE DESK
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SCHEDULE 'B'
Okanagan Basin Water Board
FINANCIAL ADMINISTRATIVE / IT SERVICES

Financial and Administrative

Services – 14 hr/wk x 52 wks = 728 hr @\$90/hr = \$65,520.00

Regional District IT Services	- 2% of RDCO relevant budget	= \$10,424
	- 4 units @ \$1,440	= <u>\$ 5,760</u>
		\$16,184

Additional IT Services @ \$60 per hour

MONTHLY PAYMENTS DUE:

Financial + Administrative	\$ 65,520.00 divided by 12 =	\$5,460.00/month
IT Services -	\$16,184 divided by 12 =	<u>\$1,348.67/month</u>
Total		\$6,808.67/month

SCHEDULE 'C'
Okanagan Basin Water Board Lease Agreement

Rent:	640 sq. ft. @ \$18.00/sq. ft.	\$11,520.00/year
Operating Costs:	640 sq. ft. @ \$3.72/sq. ft.	<u>2,380.80/year</u>
	SUB-TOTAL	\$13,900.80/year

Overhead Costs:	\$13,900.80 x 15% =	\$2,085.12/year
Combined Operating and Overhead Costs:	\$2,380.80 + \$2,085.12 =	\$ 4,465.92/year

MONTHLY PAYMENTS DUE:

Rent:	\$11,520.00 divided by 12 =	\$960.00 / month
Operating + Overhead Subtotal	\$4,465.92 divided by 12 =	<u>\$372.16 / month</u>
		\$1,332.16 / month

Financial + Administrative	\$ 65,520.00 divided by 12 =	\$5,460.00 / month
IT Services -	\$16,184 divided by 12 =	<u>\$1,348.67 / month</u>
Total		\$6,808.67 / month

TOTAL MONTHLY DUE: \$8,140.83

Regional District IT Services

January 2010

This will include the following services:

- Server Hosting
 - Secure, environmentally controlled, UPS Battery backup
- Email
 - Registered Domain
 - Spam and Virus protection
 - Outlook Web Access
- File Storage
 - Network Drive to share / store documents
- Domain / Security
 - User rights and privileges, secure documents and information
- Print Services
- Secure Remote Access - Through Citrix / VPN
- Blackberry – Enterprise integration with outlook
- Network / Internet Access – Firewalled and secure (at KLO location)
- Backup and redundant infrastructure
 - Nightly backup of all changed systems / files
- GIS Application
 - Access to our GIS Application
 - GIS integration support
 - Hosting of any GIS related Layers
 - External Web access if required
- Web Hosting
 - Can host Microsoft based Web Applications.
 - Does not include – database connectivity.
- PC Support
 - Must follow our 25% replacement Policy
 - Includes setup of replacements, trouble shooting and support
- Note: Organizations are responsible for their own PC software licenses and Hardware costs.

Any additional services required for GIS or IT related services to be billed at \$60 an hour and to be authorized by the requesting organization.

OBWB IT Support Costs

Base Cost = 2% of Relevant IT Budget \$ 10,424.10

of Units 4

Per Unit Cost \$ 1,440

Total Unit Cost \$ 5,760.00

Total IT Support Costs \$ 16,184.10

Operating Cost Calculation

Costs based on 40,000 sqft building.

2009

From Dec 002 Rev/Exp:

01.2.1200.211	Telephone	38,361.39
01.2.1200.216	Insurance	4,588.39
01.2.1200.271	Janitorial	3,972.85
01.2.1200.322	Grounds Mtce	17,692.92
01.2.1200.411	Electricity	60,062.49
01.2.1200.412&413	Water & Sewer	1,197.61
01.2.1200.414	Garbage Pickup	8,375.14
01.2.1200.415	Natural Gas	14,726.09

Total Costs: 148,976.88

Op cost per sqft: 3.72

OBWB @ 640 sqft



Agenda No: 8.1
Regular: In-Camera:
Date: June 1, 2010

OBWB

Ref: 136174

MAY 13 2010

Dr. Anna Warwick Sears
Okanagan Basin Water Board
1450 KLO Road
Kelowna, BC V1W 2Z4

Dear Dr. Sears:

On behalf of the Province of British Columbia (Province), I am pleased to advise you that your application under the *Local Government Grants Act* for an infrastructure planning grant has been approved for the following project:

Grant Description	Amount
Technical Framework for Coordinated Okanagan Drought Response	\$10,000

Details of the terms and conditions attached to this grant will be dealt with in an agreement which will be forwarded to you by Ministry of Community and Rural Development (Ministry) staff as soon as possible. This agreement must be signed and returned to the Ministry, indicating your acceptance of the terms and conditions.

The Province welcomes the opportunity to support planning in the Okanagan Basin Water Board. We believe that early planning is the best way to ensure that the environmental and health needs of your community will continue to be met in the years ahead.

.../2

Ministry of Community
and Rural Development

Office of the Minister



PO Box 9056 Stn Prov Govt
Victoria BC V8W 9E2

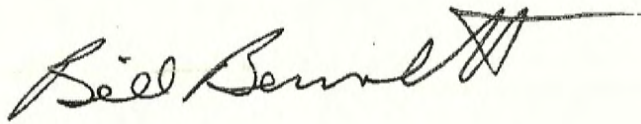
Phone: 250 387-2283
Fax: 250 387-4312
www.gov.bc.ca/csr

Dr. Anna Warwick Sears
Page 2

Through your planning efforts, the Province encourages you to find ways to use new technology to promote environmental excellence and sustainable economic development.

Congratulations on your successful application and my best wishes with your infrastructure study.

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Bennett", with a stylized flourish at the end.

Bill Bennett
Minister



OKANAGAN NATION ALLIANCE

3255 C Shannon Lake Road, Westbank, BC V4T 1V4
Phone 250-707-0095 Toll Free 1-866-662-9609 Fax 250-707-0166 www.syilx.org

Agenda No: 8.2



Regular: In-Camera:

Date: June 1, 2010

April 30, 2010

Attn: Honourable Barry Penner
PO Box 9047 STN PROV GOVT
Victoria, B.C. V8W 9E2

OBWB

FAX: (250) 387- 1356

Dear Minister Penner,

Re: **Water Act Modernization**

The Okanagan Nation Alliance (“ONA”) and its member bands affirm that the watersheds in British Columbia and Canada are in crisis; both provincial and federal governments continue to treat water as commodity for economic gain. Water is our lifeblood and all living things depend on it. It is a sacred element of our Aboriginal Title and Rights. Water is central to our ancestral beliefs, values and customs in which our cultures thrive and exist. Thus ‘water’ is sacred.

We understand that the Province is working to amend the *Water Act* in order to change how water is managed and allocated, and has released the Water Act Modernization Discussion Paper (“WAM”) as a guide for public input into this process.

The Okanagan Nation Alliance strongly demands that the prior, proprietary and unextinguished Syilx water rights 'and' the inherent water rights of other First Nations of British Columbia must be addressed and given priority given the fact that the Indigenous water rights supersedes the right of the stakeholder, water users, before the Province proceeds with legislative and policy change such as in WAM. Further, the ONA Chiefs Executive Council firmly asserts that WAM does not meet the legal standard of consultation with First Nations, and the engagement which is contemplated in WAM has an impossible short timeframe for meaningful input and legal standards.

The ONA and its member bands had proposed an initial process framework for WAM consulting; the Province rejected it. This is not acceptable as we expect a resolution to reconciling our mutual interests with regard to water. We are willing to continue to work with the Province on water governance issues. Be advised that the Okanagan Nation Alliance will be preparing an Action Plan to achieve recognition of our prior and unextinguished water rights, and to challenge the Province and Canada’s legislation and legislative policy initiatives regarding water. Additional comments from the ONA will be forthcoming.



If you can please confirm a suitable meeting arrangement between our governments, please don't hesitate to contact, the Okanagan Nation Alliance for Gwen Bridge, Natural Resources Manager at (250) 707-0095 and or via email at gbridge@syilx.org at your next opportunity.

On behalf of the Okanagan Nation Alliance, Chiefs Executive Council.

Sincerely,

OKANAGAN NATION ALLIANCE



Grand Chief Stewart Phillip
Chairman

- cc: Okanagan Nation Member Bands
Okanagan Basin Water Board
Lynn Kriwoken, Director, Innovation and Planning Team
Wenda Mason Water Stewardship Division
Mike Finley, Chairman Colville Confederated Tribes
Ministry of Aboriginal Relations and Reconciliation
UBCIC Chiefs Council
First Nations Fisheries Council